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ABSTRACT

Developed by the United States Department of Agriculture's SPEAC (Student Parent Educator Administrator Children) for Nutrition Demonstration Project, these four nutrition education curriculum components are designed to promote health and beneficial nutrition practices among preschool children. The SPEAC Preschool Unit is divided into three subsections: (1) foods for growth and development; (2) food selection and consumption for health; and (3) food in relation to cultural, social, psychological and physiological aspects of life. The Teacher Workshop materials assist the teaching staff in implementing the nutrition curriculum by increasing teachers' awareness of children's habits and attitudes, acquaintance with the SPEAC curriculum, lesson planning skills and cooperative abilities. The Parent Unit involves parents in a workshop of nutrition activities, program explanation, menu planning and basic nutrition information for the young child and suggests how to coordinate nutrition experiences and learning at the child care site and in the home. A 10 session/20 hour Workshop for Child Care Center Cooks involves cooks, preschool children and staff in nutrition education activities, promotes cooks' awareness of adequate nutrition for young children and meal planning abilities, and focuses on the operation of child care food service centers. (Author/RH)

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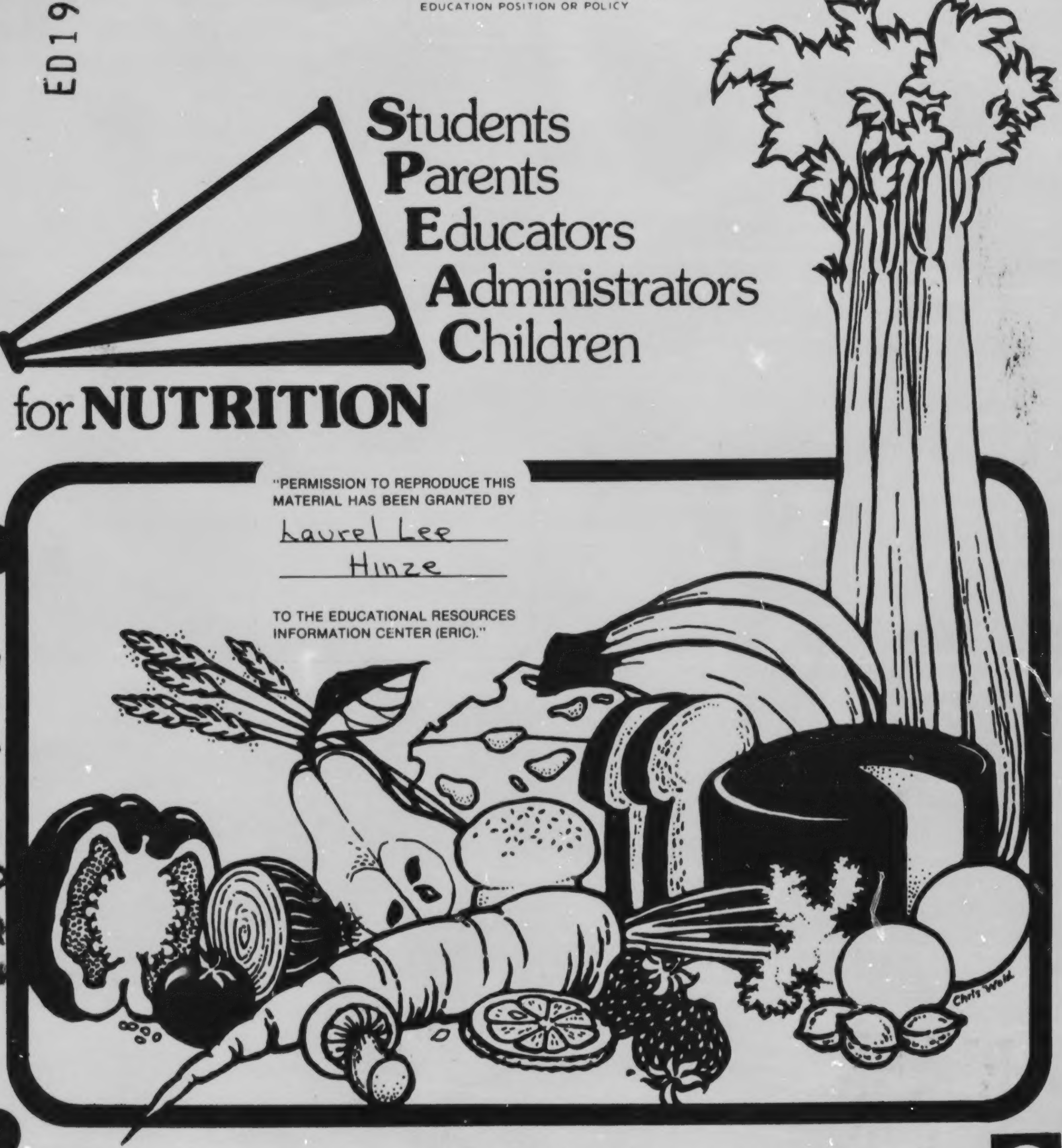

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a cooperative adventure in preschool nutrition education

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PRE-SCHOOL UNIT

a cooperative adventure in preschool nutrition education

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Rationale

The pre-school years are a vital time for nutrition education. Nutrition is closely related to the rapid growth and development of young bodies; furthermore, the nutrition habits and attitudes formed during this period often carry through a lifetime.

Food selection and eating patterns are learned. Enjoyment of food is learned. Young children can be guided to learn good nutrition habits and attitudes by positive experiences with nourishing foods during the pre-school years.

Along with the development of good nutrition habits and attitudes, children can learn more about themselves and their world from food related experiences. Childen can explore the miracle of their own bodies by using all of their senses to experience wholesome food. They can learn about the individuality of people by exploring cultural, familial and personal food preferences.

Nutrition education in the pre-school years can also impact other areas of a child's development. The opportunities for growth in cognitive and language skills are plentiful in food related activities. As a child learns to prepare different foods, fine motor skills may be enhanced. Feelings of independence and acceptance of responsibility may be other outcomes of a child's involvement with food choices and preparation.

Adult attitudes help form the foundation for a nutrition education program leading to good eating habits in the children. Consider the importance of these:

1. An attitude of curiosity and exploration encourages children to acquaint themselves with a variety of foods through many experiences - sensory, manipulative, and cognitive.

2. An attitude of accepting a child's way of doing things (within the limits of what is safe) encourages children to thoroughly examine and then enjoy many foods.

3. An attitude of expectancy that children will try and enjoy new foods and will eat adequate amounts of nourishing foods increases the likelihood that the children will behave in just those manners.

Young children are especially influenced by the examples set by and attitudes shown by their parents, teachers, and caregivers. When these influences are positive, children are more likely to try new foods and accept them into their diets. By learning about nutrition and becoming acquainted with a variety of wholesome foods, children can grow to be healthy adults and better educated consumers.

U.S.D.A. and H.E.W. Guidelines for Healthy Eating

1. Eat a variety of foods.
2. Maintain ideal weight
3. Avoid too much fat, saturated fat, and cholesteral.
4. Eat foods with adequate starch and fiber.
5. Avoid too much sugar.
6. Avoid too much sodium.

Application

The pre-school unit is divided into three units.

1. A variety of food is needed for growth and healthy development.
2. A variety of wholesome food consumed in adequate amounts will assist in maintaining ideal weight and prevent over consumption of fat, sugar, and sodium.
3. Food use is related to the cultural, social, psychological, and physiological aspects of life.

Goals

1. To introduce pre-schoolers to a wide variety of wholesome foods.
2. To encourage pre-schoolers to develop positive attitudes toward a variety of wholesome foods.
3. To encourage pre-schoolers to develop positive eating habits.
4. To integrate the study of nutrition into existing pre-school programs and current curriculums

Lesson Outline

The units are divided into separate lesson plans. Each lesson plan includes:

Title

Goals

Intended Learner Outcomes

Introduction

Materials: Items necessary for completion of the activity.

Learning Experience: Food Activities
Non-Food activities

Reinforcement Activity: Activities to enrich real food experiences.

Information for the Parent/Guardian:
Sample handouts.

Additional Resources: lists, books, records, fingerplays, games, resource people, etc..

PRE-SCHOOL NUTRITION CURRICULUM

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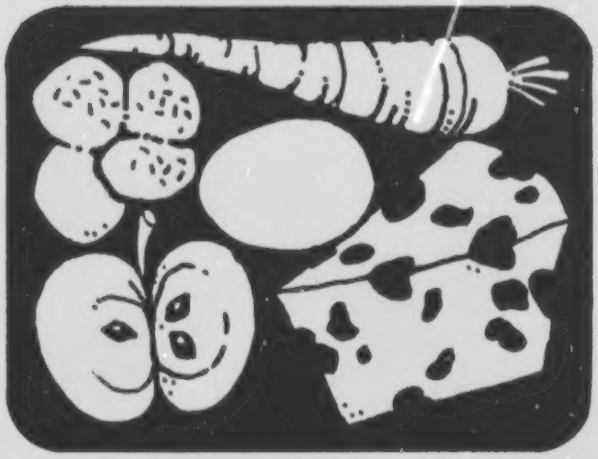
UNIT I
Introduction

A VARIETY OF FOOD IS NEEDED FOR GROWTH AND HEALTHY DEVELOPMENT



During the pre-school years children can benefit from experiences exposing them to a wide variety of nutritious foods. The sensory experiences which allow children to explore nutritious foods may also increase the child's attitude of acceptance of these foods. Children can explore foods not only through taste but also through touching to explore shape and texture, through seeing the color, design, shape, and composition, through listening to the squish, the crunch, and the mush of foods, and through smelling foods raw and cooked, separately and in mixtures, with and without spices. We believe that such experiences will increase positive attitudes toward a wide variety of wholesome foods and encourage children to eat more of these foods. The outcome, we believe, will be food habits which promote growth and good health.

The food train is a focus of interest for the pre-school children and becomes a learning tool for them as they learn about nourishing foods.

We believe that the recipe for successful learning experiences includes a large dash of fun. The lessons in Unit I introduces the child to a variety of foods. Each food group is examined through a series of sensory experiences along with language and cognitive experiences. As different children learn different ways, a variety of experiences is offered with each lesson.

Goals

The children will be aware of a variety of wholesome foods important to them. Beginning with emphasis on good handwashing habits and following through to activities the children will be involved in reinforcing decision making practices on what food to eat and what it does for me.

Intended Learner Outcomes

1. The children will develop skills in good handwashing.
2. The children will gain an understanding of the foods available in the five food groups.

Introduction

Food is important for important people like you. Beginning with clean hands and clean food emphasizes the importance of sanitation when working with food. From here an introduction to the five food groups is appropriate so the children may experience preparation and eating activities in all lessons involving food and nutrition learning.

Materials

Handwashing facilities
Items to construct the food train
Five shoe boxes
Construction paper five colors, one for each shoe box. Suggested color keys for the cars of each food group are:

Milk - White
Fruits and Vegetables - Orange
Bread and Cereal - Brown
Protein - Red
Fats, Sweets, Alcohol - Blue

Learning Experiences

Food Activities

1. Washing your hands before eating and preparing food is important to your health.

   In a handwashing area have the children all at once or in small groups wash their hands. Explain that this should be done before eating or preparing food.

2. With the use of vegetable brushes and vegetable peelers wash and clean raw foods with the children. Suggested foods are:

carrots
celery

apples
peaches
pears

All fresh fruits and vegetables

After the children wash and clean the food have them identify what train car in the food train they belong to. Then have a tasting party with the clean prepared food.

Non-Food Activities

1. Read the Good Health Train story included in this unit.

2. Construct a food train with the children. This could be easily constructed out of shoe boxes and kept on a table at the day care center. Each meal the children could have fun placing the appropriate foods or pictures of the foods in the correct cars. If food is served family style, make the boxes big enough to hold the food service containers - the pitcher of milk, the bowl of vegetables, etc..

   For further game opportunities and rearranging of the train cars the cars may be color keyed to a food group. Each unit of food than may be built upon be reviewing contents of the food train car last studied. For example: When learning about fruits, reinforce the milk unit by allowing the children to separate fruits and milk products sorting them into the two appropriate train cars.

3. How we decide what foods we eat may be discussed when the children see the foods distributed in the five cars. Favorite foods, disliked foods, and new or unfamiliar foods may be introduced by being discovered by the children in the appropriate train car.

Reinforcement Activity

1. The food train may be used for each unit in the SPEAC For Nutrition Curriculum.

2. The children may bring food items from home or recipe ideas to be used as a food experience and categorized into the appropriate train car.

3. Establish a new food chart for each child. As new foods are introduced in a lesson, list the food on the child's chart. For each lesson in the SPEAC For Nutrition Curriculum have the child put a star or stick on picture next to the foods

they try. Allow the child to write the food name and place the reward sticker on their chart. This chart may be referred to when parents and visitors come to the center and at a later date sent home with the child. This is one way for the children to bring home to their parents the information learned in a lesson. It may also encourage parents to repeat that experience and offer those foods now that the child has tried them in school.

Information for the Parent/Guardian

1. Reinforce the emphasis placed on handwashing in the day care center.
2. Send home or post directions and usage of the food train.
3. Display additional nutrition resources and offer them on a loan basis. These resources may change with the unit the children are studying.

Additional Resources

FOOD Pub. No. 544 H
Consumer Education Center
Dept. 693G
Pueblo, Colorado 81009

Yakima Home Economics Association
P.O. Box 2424
Yakima, WA 98902

Kim
Four 12 page booklets present basic nutrition education concepts, handwashing, and care of food.

THE GOOD HEALTH TRAIN

Once upon a time there was a little black engine. He had big round wheels, a smokestack, and a window for the engineer to see out. He had a white flag, the flag said "GOOD HEALTH TRAIN". He was so new that he had never gone any place at all. He had just been moved from the factory where he was built, to the roundhouse where he would work.

He had heard the men talking and he knew that he was going to pull a train to the Town of Good Health. He was so excited that he could hardly wait to begin. Very early the first morning he looked around him and saw a bright red car with a flag over it. The flag said MEAT. "I just know that is the car I am to take to Good Health Town," he said. So he chugged over to the red car and hooked it on. Then he went chugging down the track toward Good Health. He felt so proud and happy!

Just before he came to the edge of the town, a big black engine came out to meet him. "Stop! Stop!" shouted the big black engine. "You can't come into Good Health Town with nothing but meat. It takes more than meat to get to Good Health."

"Oh, dear," said the little engine. "I'll have to go back. I didn't know there were any more cars for me to pull." And he turned around and went chugging back down the track the way he had come.

When he was back in the roundhouse he looked around. He saw a bright blue car which said GRAIN on its flag. "That's it! That's the one I need," he said. And he hooked the blue car on behind the red one. He chugged happily down the track toward Good Health.

Just before he came to the edge of the town, he saw the black engine again. "Stop! Stop!" the big black engine called. "You can't come into Good Health Town with only meat and grain products. It takes more than that to get to Good Health."

"Oh, dear," said the little engine. "I'll have to go back. I didn't know there were any more cars for me to bring." He felt a little discouraged, but he turned around and went chugging back down the track.

In the roundhouse he saw an orange car with a flag that said FRUIT AND VEGETABLES. "Of course," said the little engine. "I should have known I'd need fruit and vegetables." He hooked the orange car behind the red and blue cars and started toward Good Health.

Just at the edge of town he met the big black engine again. "Stop! Stop!" shouted the big black engine. "You need meat, grain products, and fruit and vegetables, but you need some more before you can come into Good Health."

The little engine began to feel very discouraged indeed, but he turned around and went back down the track to the roundhouse.

In the roundhouse, he looked around and he saw a yellow car. The flag on it said DAIRY. "There is the car I need!" said the little engine, and he hooked it behind the orange one. Down the track he went toward Good Health.

When he came to the edge of Good Health Town the big black engine was nowhere in sight. The little engine chugged right into Good Health Town. The station master came out on the platform. He looked at the little engine. Then he looked at the cars the little engine was pulling. "Well, well," said the station master. "Meat, grain products, fruit and vegetables, and dairy products. Looks like you have all the good food you need to come to Good Health Town."

The little engine tooted happily. He had made it. He finally had all the cars he needed to go to Good Health.

Now he goes up and down, up and down, up and down the track every day, taking cars loaded with good food to the Town of Good Health.

And if you will eat some food from every one of his cars, every day, you will get to Good Health, too.

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Goals

The children will be aware of what is and isn't food and how we can change it through heat or cold.

Intended Learner Outcomes

1. The children will learn the difference between foods and non-foods.

2. The children will be aware of the changes in food when altered by heat or cold.

Introduction

Food is an integral part of our lives not only for growth and health but as part of our culture and heritage. Eating is one of the most enjoyable functions we perform every day.

There are items children may or may not necessarily perceive as being food. For the child's safety this difference can be made.

To determine the utmost pleasure and benefit from food, different cultures have explored cold and hot and the ways it affects the food we eat. Children can gain awareness of these concepts through experiences with food.

Materials

Recipe Ingredients
Recipes
"Mr. Yuk" film series and stickers
Available freezer, refrigerator, heat source

Learning Experiences
Food Activities

1. Display a selection of food and non-food items on a table. Ask children which items you eat and which foods you do not eat. Use items that can be changed by heat or cold.

2. Prepare at least one food item from raw or original state to be changed by heat. Examples: eggs, popcorn, apples, any fruits, or vegetables

   Explore each food separately. Allow the children to touch, taste, smell the unheated food. Discuss the color, shape, and texture of each. Brainstorm what will happen when it is heated, then heat each. As food is heated, comment about the odors.

   ice cube
   cold
   hard
   slippery
   no odor

   heat
   water
   cool-warm-hot
   runny
   no odor

   boil
   hot
   airy
   no odor
   disappear

Once the food has been heated ask the children to describe what happened to it. Build on their vocabulary.

Repeat each food item.

3. Prepare one of the food items from its original state to be changed by cold. Examples: water, jello, fruit juice

   Begin this activity early in the day. At the science table ask the children to taste the food available. Discuss the colors, tastes, textures. Talk about whether it is a solid or a liquid. Brainstorm what will happen if we put these foods in a refrigerator or freezer. Help them to develop their problem solving skills.

   Put the food in the refrigerator or freezer leaving a bit out to compare at the end of the day. Later, ask the children what the item was like before it was cooled. Compare the cooled sample and the one which was left out. Discuss the similarities and differences. Repeat this process with the other foods. Sample the foods affected by the cold.

   Stress that cold affects the foods we eat. Brainstorm other foods that are affected by cold.

4. Remove food from the freezer such as ice cubes, popsicles, ice milk. Let it sit out. Ask children to compare what happens when they are not kept cold.

Non-Food Activities

1. Introduce "Mr. Yuk." Using pictures of non-food hazardous items or actual items in the classroom, identify them as "Mr. Yuk" items.

2. Place "Mr. Yuk" stickers on hazardous items. Use "Mr. Yuk" curriculum and filmstrips. Give each child one or two "Mr. Yuk" stickers and have them discover with you the hazardous items to stick "Mr. Yuk" on.

3. As creative dramatics act out solids melting or liquids freezing into solids.

Reinforcement Activity

1. Identify "Mr. Yuk" items.

2. During a meal or snack discuss how the foods were affected by heat and cold.

Information for the Parent/Guardian

1. "Mr. Yuk" materials.
2. Explanation on vocabulary words and concepts presented with hot and cold.

Additional Resources

"Mr. Yuk" stickers. Send a self-addressed stamped envelop to the regional Poison Center listed in the phone book. A $1.00 donation to defray expenses may be requested. Minneapolis Poison Center address is:

Poison Information Center
701 Park Avenue
Minneapolis, MN
Telephone - 347-3141

TANK UP ON MILK

Goals

1. The child will be aware of a variety of milk products.
2. The child will see, touch, smell, hear, and taste milk in a variety of forms.

Intended Learner Outcomes

1. The child will be exposed to a variety of experiences with milk and milk products.
2. The child will demonstrate the ability to recognize milk in a variety of forms.
3. The child will choose milk as part of a daily diet unless the child has a milk intolerance.

Introduction

Milk and milk products are important foods to include in a young child's diet because they contribute calcium and protein needed by growing bodies. Not all people can drink milk or eat all milk products due to an intolerance to lactose or milk sugar.

In this unit it would build excitement to talk about the steam engine for the food train. Children are familiar with these from the Little Engine That Could and from TV. Talk about what makes the engine go. It needs fuel and water to make steam to make the wheels go around. Milk has both of these for our bodies - lots of water content plus lots of energy and good things to fuel our bodies.

Materials

Well stocked refrigerator with milk products.

Milk examples:
- Whole Milk
- 2% Milk
- 1% Milk
- Butter Milk
- Skim Milk
- Goats Milk
- *Dry Milk
- Evaporated Milk

Milk Products examples:
- Cottage Cheese
- *Yogurt
- Sour Cream
- Cheese
- *Ice Cream
- *Pudding

Empty containers of milk products
Dairy Council food models
Magazines, scissors
Cups
"Go Fish" game
Pictures of milk producing animals in natural settings

Learning Experiences

Food Activities

1. Display a variety of milk examples or have the children go to the refrigerator and kitchen to get things they think are made from milk.

2. Discuss with the children the differences in the milk and milk products. Compare the following:
    - -visual appearance of containers
    - -visual appearance of milk -
      Is milk thick, lumpy, thin?
    - -color of milk
    - -smell
    - -sound of stirring and measuring dry milk to become reconstituted milk
    - -origin or source of milk product

3. Have children pour a small glass of milk to taste. The child may taste one or more of the varieties of milk.

4. I like milk tasting parties: Have a variety of milk products available for children to taste or use products discovered from their kitchen trip.

5. Make ice milk*, eggnog, pudding* of a food using milk or milk product. Sample your product.

Non-Food Activities

1. Display the containers of a variety of milk and milk products. Discuss the variety of milk products.

2. Have children place a picture of the milk product by or inside the container. Use pictures from magazines or the dairy council food models. This may also be done on a mural or bulletin board or the food train.

3. Play "Go Fish" -
   Children will take turns fishing for milk products. After they hook a fish and reel it in the child will tell what item he/she caught and place it in the matching container. Foods other than milk products may be added so the child must identify only milk products.

4. Display books and pictures of the milk producing animals.

Reinforcement Activity

1. Ask the children the following questions:
   What does milk taste like?
   What milk did you like the best?
   What other foods can be made from milk?
   What milk product was new to you?

If you could choose any of these milk products on the table which one would you choose? Why? For each new food the child tries add the food and star to their new food chart posted near the food train.

2. Have children identify the milk and milk products they eat at snack and/or lunch.

3. Place the milk, milk product, carton or picture in the appropriate train car on the food train.

4. Make materials available in the play area for the children to pretend to be the milkman or to play store with the milk product containers or to "milk" cow (use a rubber glove for this). They could also feed milk to dolls in imaginative play. Warning some will try to (breast feed) nurse the dolls - both boys and girls will experiment with this.

5. Visit a dairy farm, dairy store, or creamery in your community. Some children's animal farms provide programs where the children may have the opportunity to milk a cow.

Information for the Parent/Guardian

1. Send home the recipes used.

2. Send home the instruction sheet on how to construct and play "Go Fish."

Additional Resources

National Dairy Council
6300 North River Road
Rosemont, Illinois 60018

American Dry Milk Institute
Research Education
130 North Franklin St.
Chicago, IL 60611

Posters; More Milk Please 20 pp. and six posters
pamphlets: Uncle Jim's Dairy Farm 24 pp.
My Friend the Cow 36 pp.
Film - Hey Cow
Available in a variety of sources are:
Fingerplays, songs, and creative movement exercises.

Borden Company
285 Madison Ave.
New York, NY 10017

Childrens Books Green Grass and White Milk, Aliki Brandenberg, Crowell, $4.50.

Wonder Starters Milk/Eggs, Wonder Books. Grosset & Dunlap, Inc..

Carnation Company
Home Service Division
Campbell Place
Camden, NJ 08010

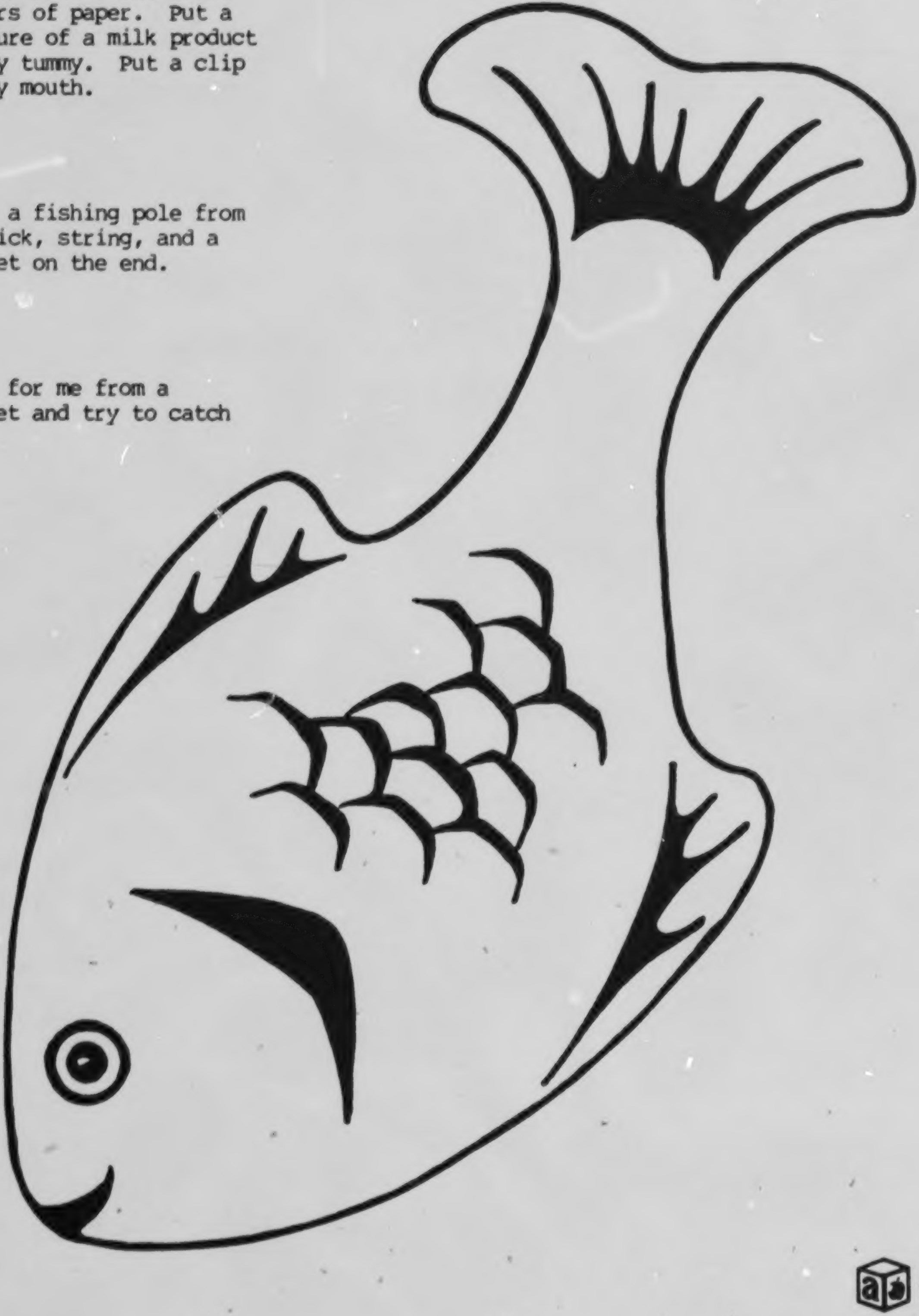
*These foods listed are extra foods. These foods do not meet the USDA Food requirements for the Child Care Food Program.

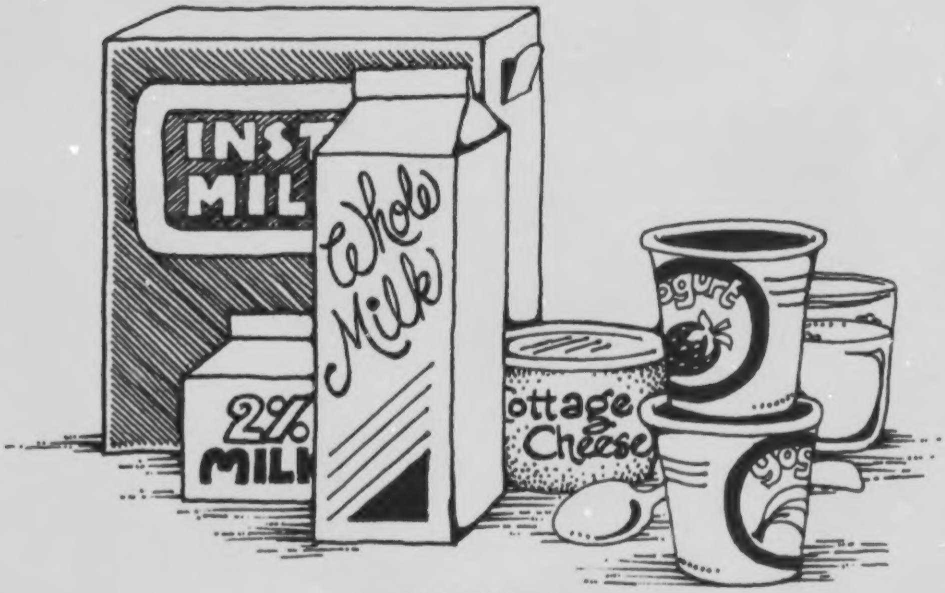
Go Fish Game

1. Cut me out of different colors of paper. Put a picture of a milk product on my tummy. Put a clip by my mouth.

2. Make a fishing pole from a stick, string, and a magnet on the end.

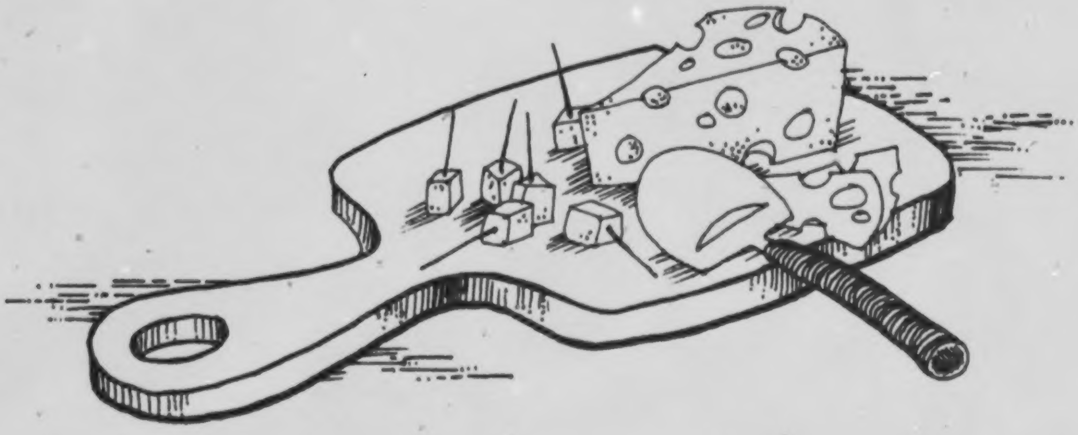
3. Fish for me from a basket and try to catch me




INST
MIL
Whole Milk
2%
MILK
Cottage Cheese
yogurt
yog

MILK GROUP

Snacks from this group are rich sources of calcium, riboflavin, Vitiman D, and protein. Cheese cubes, cottage cheese, yogurt, and milk drinks of all kinds are popular and nutritious. Low fat milk and cheeses are lower in calories and cholesterol and may also be selected.



NATURE'S SWEET TREATS—FRUIT

Goals

1. The children will be exposed to a variety of fruits.
2. The children will experience skills in identifying, tasting, and preparing fruit in a variety of forms.

Intended Learner Outcomes

1. The children will taste a variety of fruits.
2. The children will be able to identify a variety of fruits.
3. The children will gain experience in cleaning, slicing, and juicing fruit.
4. The children will choose fruits in their daily diet when offered.

Introduction

Fruits are an important part of a balanced diet because they contribute vitamins such as A and C, as well as minerals and fiber. It is important for children to become familiar with a variety of fruits and learn to include them in their daily diet.

The fruit is the edible pulpy mass surrounding the seeds. Remember some vegetables (tomatoes, cucumbers, squash) are technically fruits.

Some children may be able to realize that full strength fruit juice comes from a fruit. It should be noted that the fruit punches and powdered fruit drinks and ades are not full strength juices. Punches, drinks and ades may contain added Vitamin C, but they are primarily sugar and do not contain other nutrients found in pure fruit juices. Their consumption should not be encouraged.

Materials

Food models or pictures of food (2 of each)
Grocery bag
A variety of fruits dried and fresh (2 of each)
Empty food package and artificial fruit.

Learning Experiences
Food Activities

1. Play grocery bag upset
    a. Have a grocery bag full of fruit. Have two or more of each kind of fruit.

b. Have a number of bowls on a table. The labels on the bowls will vary. Picture labels such as colors or pictures may be used. Options for a series of labels may be:

colors
textures
sizes
shapes

c. When a child takes a fruit out of the grocery bag he/she will place it in the bowl according to the color, texture, size, or shape depending on the category used. Discuss all of the above regardless of the bowl labels or categories.

d. Each child may be given a fruit and find the person that has the matching fruit like theirs.

2. Display the variety of fruits. Let the children supply their own descriptive words for how the fruits look and feel. Such words as smooth, fluffy, bumpy, hard, heavy, slippery, etc may be suggested.

3. After children wash their hands and wash the fruit, slice one of each pair of fruit in half. Observe the inside of the fruit. Smell the cut fruit, touch, listen to the sound as it is cut.

4. Select a juice fruit such as an orange. With the children experience the following: (if possible supply each child with their own fruit)

   - peel an orange and sample the sections
   - examine the orange sections
   - juice an orange with hand or electric juiçer and pour the juice into a glass.
   - drink the pure fruit juice.

5. Have the children see, touch, smell, and taste foods that have been dried. Discuss the differences in the fresh and dried fruit. Examples:

Bananas
Apricots
Prunes
Apples
Thompson grapes
Raisins
Plums

Note: natural sugar is more concentrated in dry fruit and the stickiness of dried fruit is more harmful to teeth. It is advisable for the children to rinse their mouth with water or brush their teeth after eating dried fruit.

6. Select a dried fruit such as a prune.

   a. Place two dried prunes in a jar of water. Soak them until they absorb much of the water. Discover with the child how the prunes have changed.

   b. The children could observe the changes in the prune as to taste, appearance, feel, and use.

   c. As a group prepare a food item using dried prunes. The children may assist in this preparation. A possible recipe using dried fruits resulting in a pastry:

      Kolaches

      1 cup butter
      2-3 oz. pkg. cream cheese
      2 cups flour
      Any pastry filling (prune, apricot)

      Cream butter and cream cheese. Add flour. Chill. Roll dough like pie crust. Cut in squares (4x4). Drop filling in center of each square, fold to middle. Bake at 350° for 10-15 minutes or until slightly browned.

7. Prepare with the children a salad that contains raisins, carrots, or bananas.

8. Prepare a stewed fruit such as prunes or rhubarb with the children.

9. Prepare with the children a single fruit in an interesting variation. Examples of these are:

   a. A banana rolled in honey and wheat germ and frozen.

   b. Baking an apple.

Non-Food Activities

1. Play grocery bag upset with artificial fruit or fruit models.
   "Upset the Fruit" game.

- children sit in a circle
- pin a fruit food model on each child (be sure to have two of each kind)
- identify each child's fruit model
- the teacher calls out different fruit names, one at a time. When the children hear their fruit, they should get up and exchange places. Before playing the game, identify who your partner is with the same fruit.

2. Learn finger plays about fruit.

Reinforcement Activity

1. Have the children identify and sort fruit that is dried, sliced, squeezed, or cooked. Does it look different? Which smells stronger? The dried banana, fresh banana with peel, or fresh banana unpeeled?
2. Visit a fruit market or fruit counter at a local grocery store. Purchase the fruit for a fruit salad to be prepared in the center upon return.
3. Have the children combine fruits in a fruit salad and eat it as a snack or with lunch. Preparation and identification skills will be displayed.
4. Visit an orchard, a vineyard, a neighborhood garden or look for fruit trees in yards when walking.
5. For each new fruit the child tries in this lesson add it to their new food chart.
6. Place fruit into the appropriate train car on the food train. It is now possible to play a categorizing game between the milk and milk products and the fruit by using the appropriate train cars.

Information for the Parent/Guardian

1. Send home pure fruit juice and fruit salad combination recipe pages.

Additional Resources

Recipes from Tom Thumb Workshop
Dairy Food and Nutrition Council
Hillsbough Office Bldg. #1
2353 Rice Street
St. Paul, MN 55113

Nutrition in a Changing World
Penn State University
University Park, PA 16802

Creative Food Experiences for Children
Mary T. Goodrum and Gerry Pollen
Center for Science in the Public Interest

SPEAC For Nutrition Annotated Bibliography
Free color charts and picruers of fruit

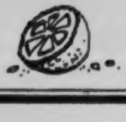
International Apple Institute
2430 Pennsylvania Ave. N.W.
Washington, D.C. 20037

Sunkist Growers, Inc.
Consumer Services
P.O. Box 7888
Van Nuys, CA 91409

California Tree Fruit Agreement
P.O. Box 5498
Fresno, CA 95825

A variety of finger plays, songs, and creative dramatics are available in early childhood resource material.

PURE FRUIT JUICE

YOU NEED: 1 ORANGE CUT IN HALF  1 JUICER 1 CUP

1. PLACE ORANGE ON JUICER

2. POUR INTO CUP

3. DRINK

FRUIT SALAD COMBINATIONS*

1. Cut up orange sections or mandarin oranges, and diced apple or banana slices, garnished with coconut or pomegranate seeds.

2. Banana slices, rolled in chopped peanuts and pineapple spears.

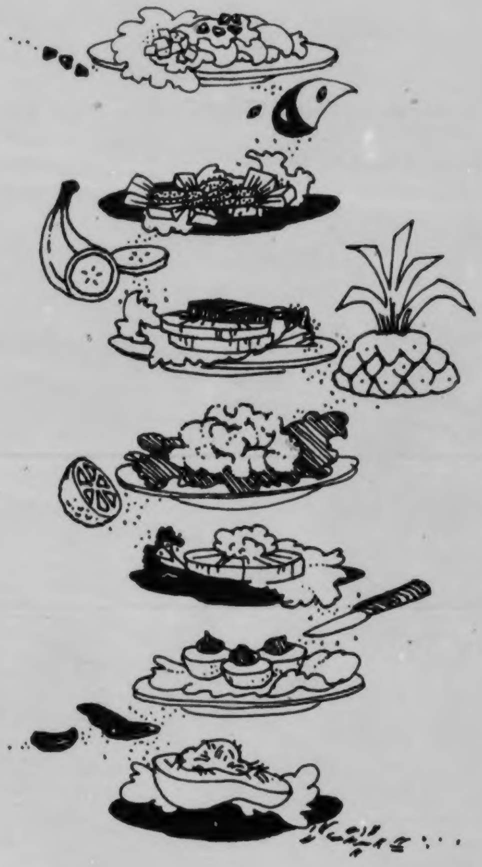
3. Long slices of banana and cubes of jellied cranberry sauce; or slices of pineapple topped with round slices of jellied cranberry.

4. Cut up apples, oranges, bananas, grapes, marshmallows, blended with mayonnaise and whipped cream.

5. Pineapple slices or peach or pear halves topped with cottage or cream cheese.

6. Prunes or apricots stuffed with cream cheese, cottage cheese, or peanut butter.

7. Pear or peach halves with mayonnaise topped with grated cheddar cheese.



*Serve above salad combination of salad greens with favorite fruit dressing or serve fruits separately.

Manipulative skills children can learn while preparing fruits:

- peeling
- slicing
- using an apple cutter
- separating sections of citrus
- scooping seeds out of a melon

Fruits are rich sources of Vitamins A and C as well as natural fiber and carbohydrates. A wide variety of foods from this group is available year around -- take advantage of seasonal available and the variety of forms.

A HARVEST BOUNTY OF VEGETABLES

Goals

1. The children will be exposed to a variety of vegetables.
2. The children will gain skills in identifying, tasting, and preparing vegetables in a variety of forms.

Intended Learner Outcomes

1. The children will be able to identify a variety of vegetables.
2. The children will enjoy tasting a variety of vegetables prepared in many forms.
3. The children will choose and eat more vegetables in their daily diets when they are offered.

Introduction

Vegetables are an important part of a balanced diet. They provide us with vitamins especially Vitamin A and C, minerals, and iron, as well as fiber. Many children do not like vegetables because they are not familiar with them. Many children's palates are jaded with refined sugar and they reject most things that do not have a high sugar level. As children become more familiar with vegetables they can learn that they are an appealing part of a balanced diet.

Materials

Fresh vegetables assortment
Artificial vegetables
Food models
Knives
Bowls or baskets
Recipe ingredients and preparation items
Vegetable seeds
Vegetable or garden supply catalogs
Celery
Food coloring
Mystery box

Learning Experiences
Food Activities

1. Prepare a table arrangement of vegetables. The vegetables may be grouped and discussed in the following ways.
   a. Seasonal vegetables.
   b. Vegetables we grow in our gardens.
   c. Discover vegetables that roll and are round; that are long and skinny, that are hard, soft.

d. Group by color, shape, and texture.

2. After washing your hands and the vegetables, slice the vegetables in half. Discover what it looks like inside. Match the two halves. Children may assist in smelling, touching, hearing, and tasting the vegetables. Use a pair of vegetables keeping one whole.

3. Display raw vegetables and cooked form of the same vegetables. The children may identify, feel, taste, smell, see, hear, and sample some of the vegetables in the two forms. The children may assist in preparing the cooked vegetables. Make vegetable soup. Keep some vegetables raw. Eat some raw and some cooked in the soup.

4. Prepare a vegetable from raw form to cooked form as a group. An interesting vegetable to expose the children to is spinach. Prepare the recipe Spinach Balls with the assistance of the children.

SPINACH BALLS

$1^{1}/_{2}$ cups fresh spinach, cook and chop
(Have the children taste the raw spinach leaves before rolling in balls.)
$^{1}/_{2}$ cup margarine - soft

Add: 2 cups herbed prepared stuffing
1 cup Parmesan cheese
6 eggs, whip with fork
salt and pepper to taste

Roll into balls and bake at 350° for ten minutes. Another interesting vegetable to cook from raw to cooked are peas. Have children shell peas from pod, cook in a saucepan and eat as a snack or part of a meal.

5. Marinate raw or cooked vegetables. Carrots, cauliflower, beans, green pepper or excellent sources for marinating. The children can help prepare the vegetables by using a crinkle cutter, plastic knife or mouli grinder.

Discuss the marinating time necessary to make the necessary changes in the taste, smell, texture of the vegetables. Let the children taste the marinating vegetables each hour. Let them say when the vegetables are strong enough. Their more sensitive palates may choose a shorter marinating time than an adult would.

6. Soak a celery stick in food coloring and watch the color use up the stalk. Discuss cellulose and fiber as the procedure is occuring. Refer to the reference, Creative Food Experiences for background information on cellulose and fiber.

7. Prepare a vegetable salad from a combination of raw and cooked vegetables. Remember to wash hands and vegetables.

    - Scrubbing, tearing, breaking and snapping require children to use their hands as tools to do something that changes the shape of the food.

    - When preparing and eating the vegetable salad, discover the sound of the vegetables breaking or being chewed. An important language skill is being able to discriminate between sounds.

        a. Have the children listen for one specific sound like carrot crunching.

        b. Have the children close their eyes and try to guess what vegetable made the sound. This can also be done for the taste and feel of the vegetables.

Non-Food Activities

1. Prepare a table of food models or pictures of vegetables. Identify the vegetables by name, color, and shape.

2. Using garden supply catalogs, have children cut out pictures of vegetables to make a collage or their own vegetable book.

3. Plant vegetable seeds in individual containers or in a garden. The children can watch them grow, care for them, and harvest them.

4. Place cut tops from vegetables in water to see which ones will grow. Place the vegetables in the sun and wait for them to sprout. Example: carrots, sweet potatoes, radish, pumpkin. Discuss the differences.

5. Read books about vegetables. Refer to additional resources.

2. Suggest the involvement of the child in planting, caring for, and harvesting a garden. Inside gardens may also be a source of involvement for the child

3. Plan a vegetable tasting party with the parent/guardian and the children. Children and adults can jointly prepare vegetables and taste.

Additional Resources

National Dairy Council
6300 North River Road
Rosemont, Illinois 60018

Guiding Nutrition Behavior in Pre-Schoolers
Ohmsted County Council for Coordinated Child Care, Inc.
Rochester, MN 55901

Creative Food Experiences for Children
Mary T. Goodrum and Gerry Pollen
Center for Science in the Public Interest
1755 S. Fourth Street N.W.
Washington, D.C. 20009

WIC And YOU and Recipes Too
Lois Peterson, Lois Schmidt
Minneapolis Public Health Department
250 So. Fourth Street
Minneapolis, MN 55415

Vegetable Salad Combination Handout Sheet

"Alfalfa Sprouts"
A Sunshine Sprout Card from Wintergrens
Indoor Farm, P.O. Box 383
Northfield, MN 55057

The How to Grow and Cook It Book of Vegetables, Herbs, Fruits, and Nuts
Jacqueline Heriteau, New York:
Hawthorne Books, Inc. 299 pp.

Children's Books
Krauss, R. The Carrot Seed, New York:
Harper & Row 1945.

Mintz, L.M. Vegetables in Patches and Pots: A Child's Guide to Organic Vegetable Gardening. New York: Farrar, Straus and Giroux, 1976.

Selsam. M. The Carrot and Other Root Vegetables.
New York: Marrow, 1970.

Tresselt, A. Autumn Harvest. New York: Lathrup, Lee, and Shepard, 1957.

Wolf, D. Leo The Lettuce Lion and His Vegetable Kingdom. The Steinbeck Country General Store, Inc., P.O. Box 510, Salines, CA 93902, 1978.

A variety of finger plays, songs, and creative dramatics are available in early childhood resource materials.

VEGETABLE SALAD COMBINATIONS*

1. Grated raw carrots and drained crushed pineapple or diced celery with raisins.
2. Sliced zucchini, raw cauliflowerettes or thinly sliced radishes with tossed greens.
3. Tomato sections, cucumber slices and caulifloweretes marinated in French dressing, each in its own little lettuce cup.
4. Cooked baby lima beans, sliced mushrooms and sliced green onions, seasoned with oregano.
5. Mound of cottage cheese with diced green or red peppers, cucumber and onions.
6. Small tomatoes stuffed with cottage cheese sprinkled with minced chives, parsley, or stuffed with cabbage salad.
7. Grated raw carrots and diced celery, mixed with raisins or nuts.
8. Grate raw carrot, chopped sweet onion, chopped pepper, chopped celery, grated rind and sections of one orange and lettuce.

*Serve above salad combinations on salad green with favorite dressing. Eat some of the ingredients alone so you know what individual ingredients taste like.

Manipulative skills learned by the children are:
cleaning
shredding
slicing
grating

Vegetables are a rich source of Vitamin A and C as well as natural fiber and carbohydrates. A wide variety of foods from this group are available year around take advantage of seasonal availability and prepare vegetables in a variety of forms. Raw vegetables properly cleaned are important sources of vitamins, natural fiber and carbohydrates.

JOHNNY AND THE BEAN SEED

Some seeds grow slowly.
Some seeds grow fast.
This is a bean seed.
It grows very fast.

This Johnny, he wanted to plant a bean seed himself. So he found a pot, and he filled it with soil. Then he put the bean seed in the soil and covered it very carefully, for he knew there was food for the seed in the soil. He took his watering can and sprinkled the soil because plants also need water to grow. Finally he put it on the windowsill in the warm sunlight.

Then he sat and he waited and he twiddled his thumbs. Until the next day. When the sun came out he looked to see what his seed had done.

It had soaked up all the water and grown fatter and fatter so he sprinkled it with water, for plants need water to grow.

Then he sat and he waited and he twiddled his thumbs and thought how strange to see my little bean seed grow so fat, fat, fat until the next day. When the sun came out he looked to see what his seed had done.

It had pushed deep into the soil and a root had grown down from one end of the seed. So he took out his watering can and sprinkled it with water, for plants need water to grow.

Then he sat and he waited and he twiddled his thumbs and thought how strange to see my little bean seed grow so fat, fat, fat that it pushed, pushed, pushed until a root grew down until the next day. When the sun came out he looked to see what his seed had done.

It had shoved through the soil to find the sunlight and a little green sprout appeared. So he took out his watering can and sprinkled it with water, for plants need water to grow.

Then he sat and he waited and he twiddled his thumbs and though how strange to see my little bean seed grow so fat, fat, fat that it pushed, pushed, pushed until a root grew down, and it shoved, shoved, shoved until a green sprout appeared until the next day. When the sun came out he looked to see what his seed had done.

Two beautiful green leaves had appeared. So he took out his watering can and sprinkled it with water, for plants need water to grow.

Then he sat and he waited and he twiddled his thumbs and thought how PROUD I am to have grown such a beautiful bean plant.

STORY by Mary Sheedy Kurcinka
FLANNEL BOARD OUTLINES ORGINALLY BY Joseph Kurcinka
FINAL ART WORK BY Chris Wold

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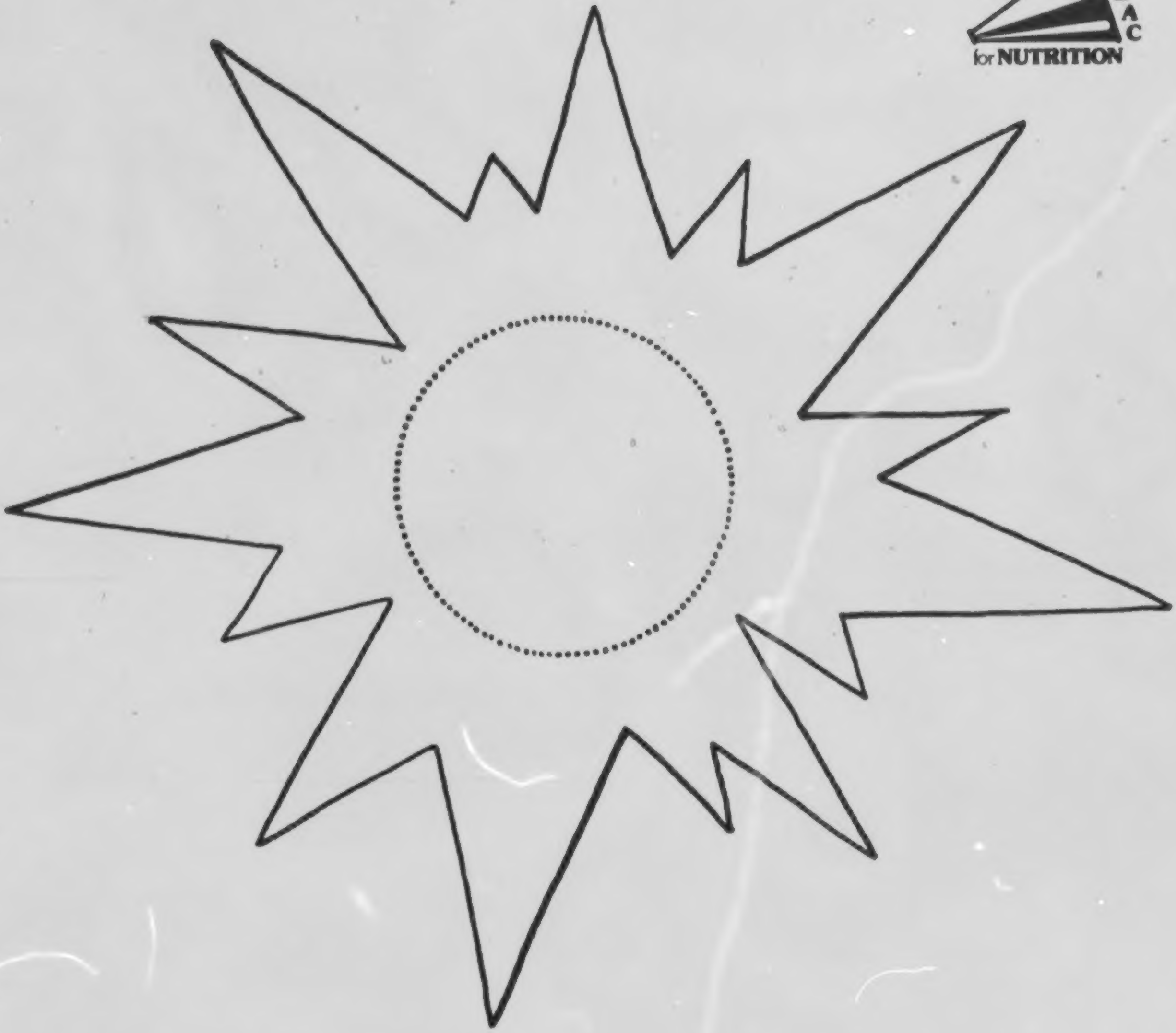
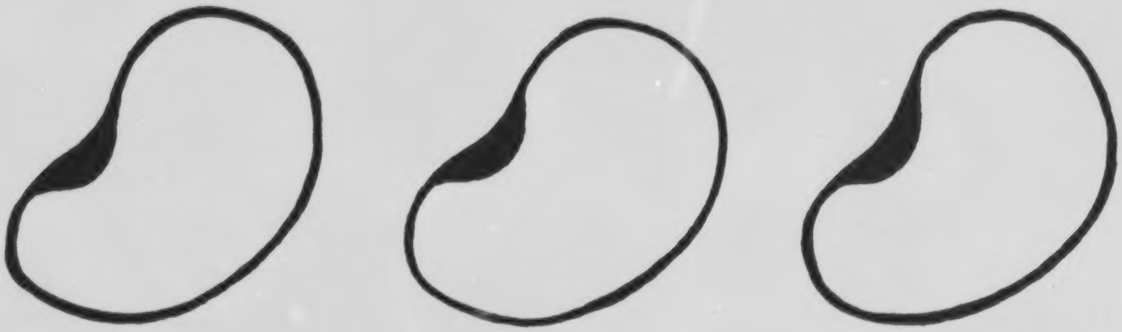
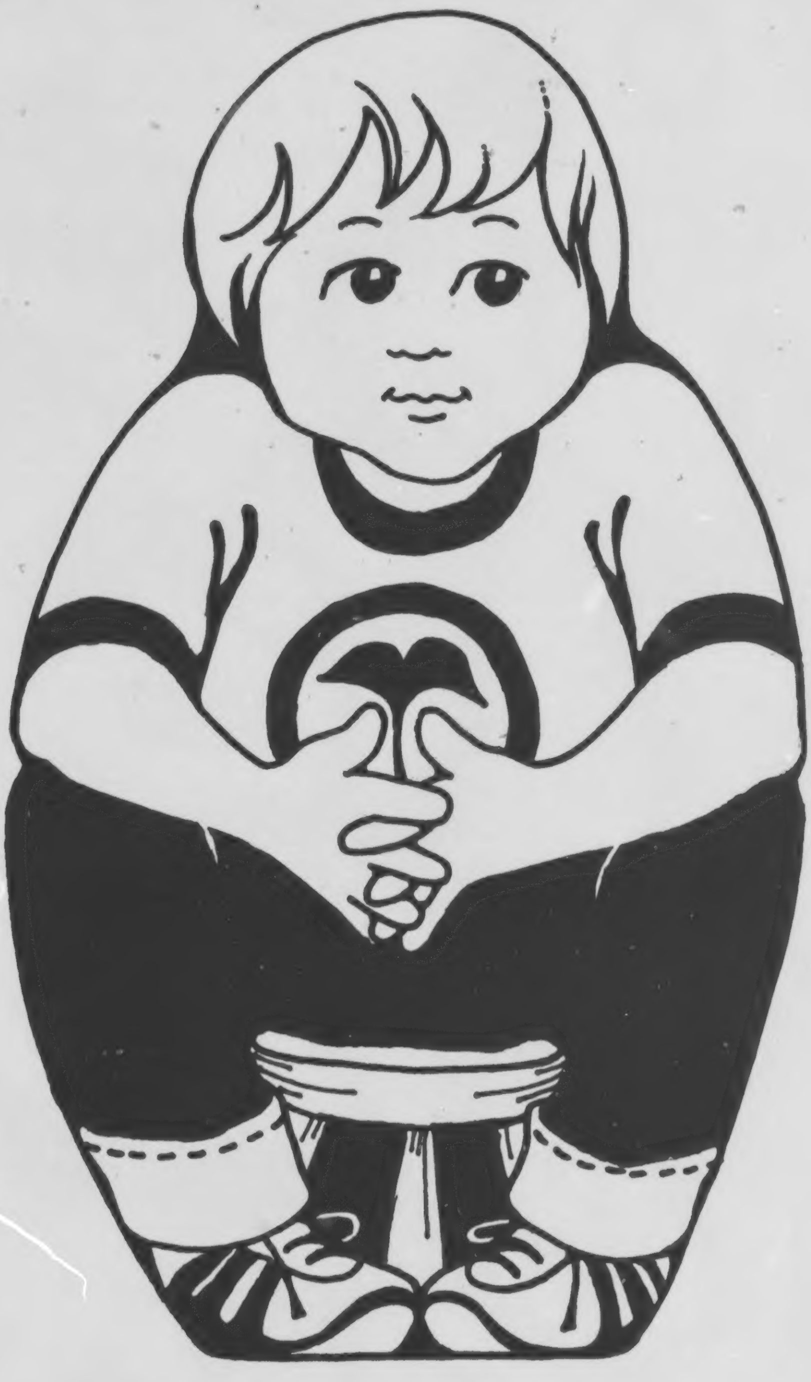




Outlines for Flannel Board Story,
Johnny and the Bean Seed



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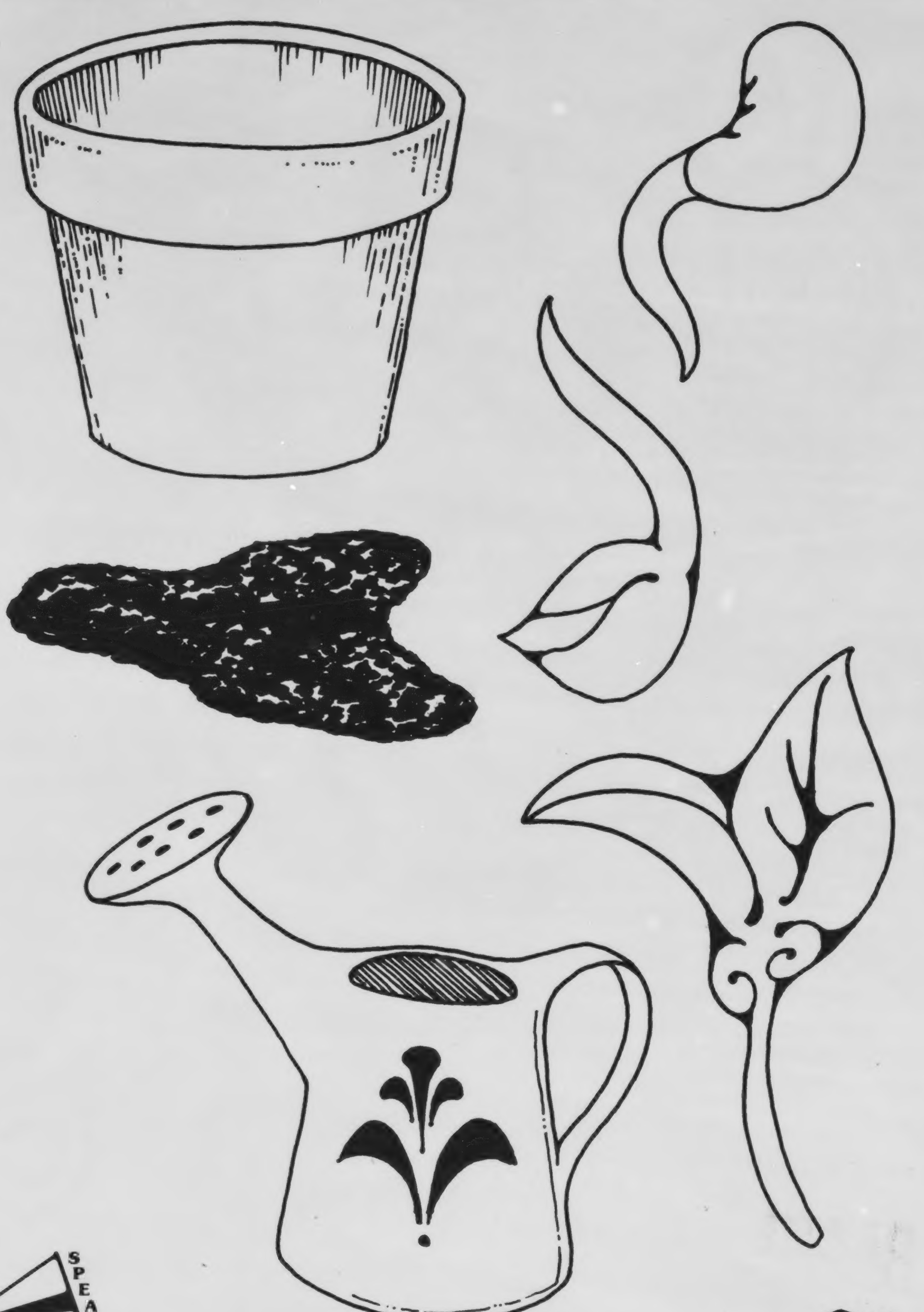
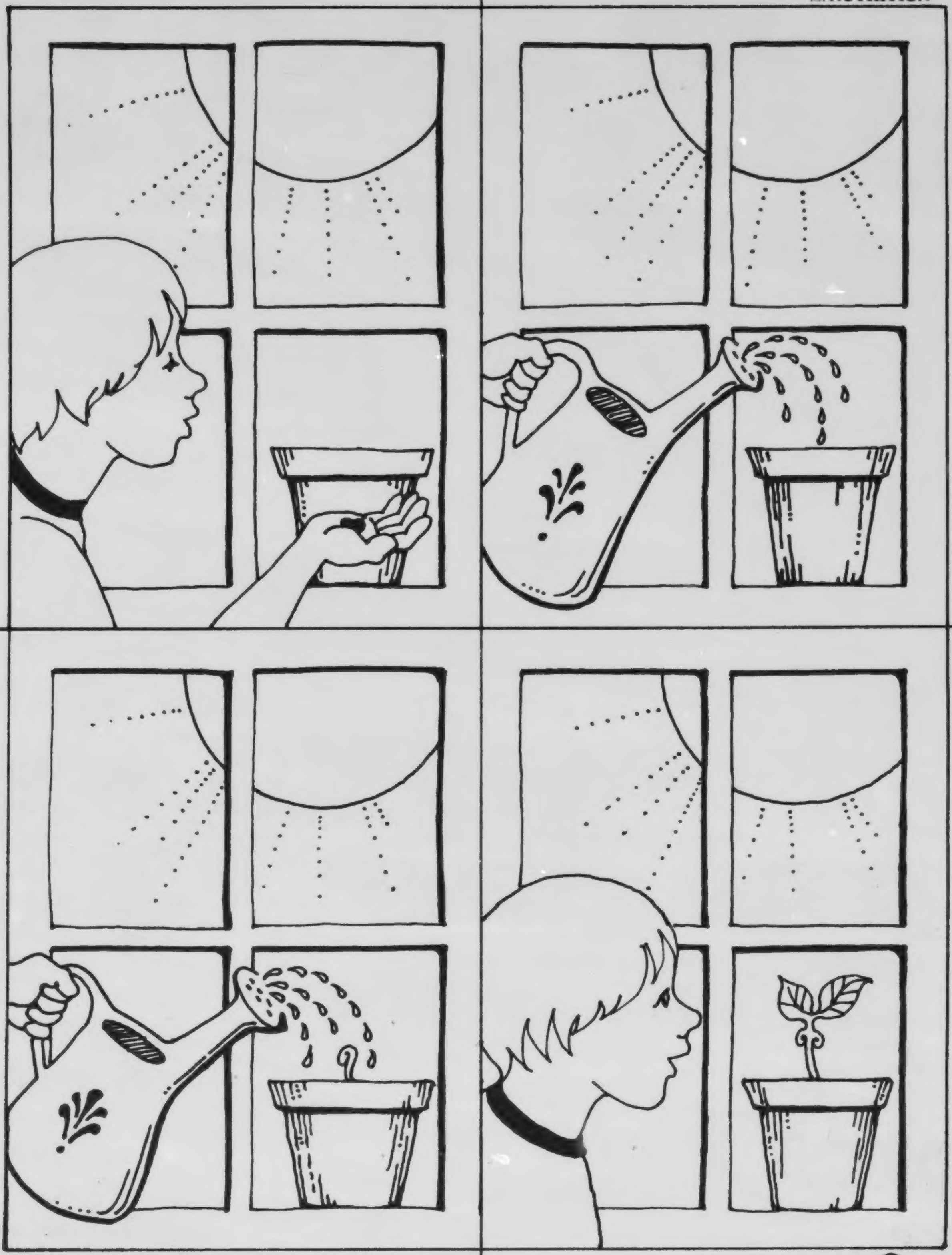


SPEAC for NUTRITION



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BREADS AND CEREALS–NUTRITION PACKED FUN FOODS

Goals

1. The children will be exposed to a variety of grain products.

2. The children will gain skills in identifying, tasting, and preparing a variety of grain products.

Intended Learner Outcomes

1. The children will identify a variety of grain products and their usage in end products.

2. The children will choose and eat more grain products in their daily diets when they are offered.

Introduction

Grains are made into breads, cereals, pastas, rice, and noodles which are an important part of our daily diet. Grain products supply our bodies with B vitamins, iron and energy. In addition, whole grain products supply our bodies with fiber which is important in the healthy functioning of the digestive system and may be associated with a lower incidence of bowel cancer.

In recent years, Americans have been consuming less grain and cereal products, and replacing them with calories from fat. High fat diets have been associated with heart disease and cancer. Children need to learn to include grain products as part of their daily diets.

Materials

Grain samples:

Samples of different flour: white, whole wheat, oatmeal, corn, and rye.

Samples of an item displaying the use of a variety of the flours.

Food models.

Recipes using a variety of grains.

Learning Experiences
Food Activities

1. Prepare a table of different types of grains. Encourage the children to feel the grain. Discuss the textures, colors and how the grains may be used.

2. During a period of one week offer a variety of grain products for snacks. This will encourage the children to sample a variety of foods from grains. Example: crackers; bread varieties; cereals, noodles, pasta, rice cakes.

   Touch, feel, taste, smell, and listen to the different products.

3. Prepare bread dough or use frozen bread dough, let raise and allow the children to explore. Have the children make individual loaves, or formations with the bread dough. Bake the bread and eat as a snack or part of a meal.

   In preparation of the bread dough talk about the yeast and kneading procedure. The children may knead the dough and watch the bread rise. If grain needs grinding, assist the children in grinding the grain. Grind the grain with a mortar and pestle or between two stones. This may be a separate activity.

4. Prepare with the children a sample of bread and cereal foods that exemplify various cultures. Examples are grits, hominy, corn bread, tortilla, fry bread, cracked corn, hoe cakes, sweet potato biscuits, and dumplings.

5. Prepare hard tack with the children. The children will be using three different grains. Measurements, utensils, and the procedure may be discussed as the hard tack is being prepared. The recipe is included in this lesson.

Non-Food Activities

1. Read the story "The Little Red Hen" or a story showing the process of bread making. Have children role play the story. Pantomime may include:

   digging, planting, cutting, grinding, filling grain bags, mixing, kneading, dough rising, putting in oven.

   Putting loaves on the truck, driving to the store, unloading.

   Putting on shelves, pricing with a stamper, operating a cash register, putting in a sack.

   Carrying the package home, opening it, eating.

2. Adapt this story to modern days by talking about and pantomiming packaging, transportation, and selling in a store. Grocery cart mix-up. Have children take turns pulling out food models or food items from a grocery bag. Identify the food item and tell if it is made from grain or not.

3. Make a collage from grains.

4. Display and talk about posters and pictures of grain fields, harvesting, and modern methods of harvesting through consumption of grain products.

Reinforcement Activity

1. Look at the variety of grains sold. How many ways do you see one type of grain sold? What are the differences?

2. Visit a bakery. Observe how the grains are used and sold in the end products.

3. Purchase a variety of grains. Upon returning to the center or at the location mix a variety of grains to use as a cereal or granola product. The chidren will be identifying the grains and selecting the grains to include.

4. Add new foods a child tries to their new food chart.

5. Incorporate the foods into the food train game. Place into the appropriate train car.

Information for the Parent/Guardian

1. Encourage usage of enriched and whole grain products and a variety of cereal products in the child's daily diet.

2. Send home recipes.

3. Send home a list of co-op's and what grains they offer in your community.

Additional Resources

Pictures of wheat, corn farm fields.
SPEAC For Nutrition Annotated Bibliography
Recipes using a variety of grain products. A sample are included in this unit.
A local grain exchange.

Nutrition in a Changing World
Penn State University
University Park, PA 18602
pages 193-194 song and pantomime
"The Farmer grows the Wheat"

For a variety of charts, pamphlets, posters, photographs, filmstrips, and recipes contact:

Cereal Institute
135 South LaSalle Street
Chicago, IL 60603

The Pillsbury Company
Department of Nutrition
840 C Pillsbury Bldg.
Mpls., MN 55402

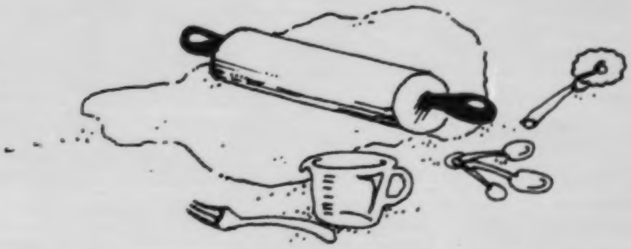
Quaker Oats
Home Economics Department
Merchandise Mart Plaza
Chicago, IL 60654

Rice Council
Box 22802
Houston, TX 77027

BREADS AND CEREAL GROUP

The bread-cereal group can provide many good nutritious snacks, are rich in the B vitamins, and complex carbohydrates. Include whole grain or enriched breads, rolls, crackers of all kinds, unsweetened cereals, tortillas, party mixes of cereals and nuts, pocket bread, and granola.

HARD TACK



1 cup margarine
$^1/_2$ Tsp. Salt
2 cups sifted flour
2 cups quick oatmeal
2 cups 40% Bran Flakes
2 tablespoons sugar
$^1/_2$ cup cold water

Mix like pie crust. Add cold water. Let stand $^1/_2$ hour. Roll thin on pastry cloth. Prick with fork. Cut with pizza cutter. Bake at 350° for about ten (10) minutes. (Watch closely).

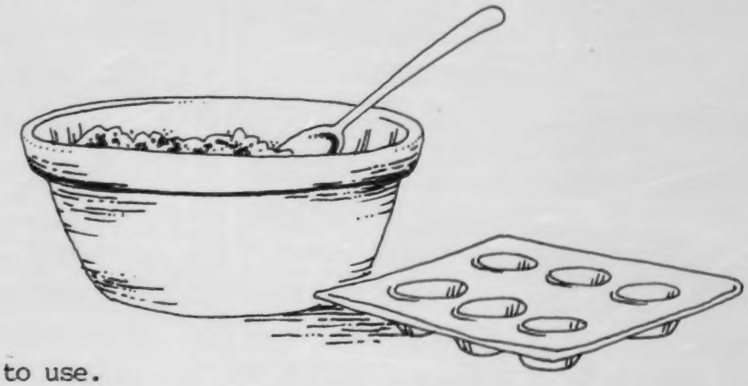
Refrigerator Bran Muffins

This recipe keeps for several weeks in the refrigerator. When piping hot, muffins would be a great addition to a meal. Just scoop them into greased muffin tins and bake at 400° F. 20 minutes or until golden brown. They also pack well in lunches and make a good snack choice. Additional ingredients may be added, such a nuts, cut-up dates, or raisins.-

Pour 1 cup boiling water over 1 cup 100% bran cereal. Let cool, set aside.

Cream together 1 cup sugar with $^1/_2$ cup shortening. Beat in 2 eggs.

Add and mix together:



cooled bran mixture
2 cups buttermilk
2 cups All-Bran cereal

Sifted dry ingredients:

2 $^1/_2$ cups flour
2 $^1/_2$ tsp. baking soda
$^1/_2$ tsp. salt

Store in refrigerator until ready to use.

PROTEIN—GROW POWER FROM ANIMALS AND VEGETABLES

Goals

1. The children will become aware of a variety of protein sources.
2. The children will learn to eat a variety of protein foods.

Intended Learner Outcomes

1. The children will be exposed to a variety of foods rich in protein.
2. The children will demonstrate the ability to recognize protein in a variety of sources.
3. The children will choose protein foods wisely and economically as part of their daily diet.

Introduction

We need protein to build and maintain body tissues as well as aid in the formation of the regulatory materials of the body. Animal sources give us high quality protein for growth and body repair but they also may give us too much fat and cholesterol - things that may hurt our health. Choosing some protein from vegetable sources reduces the amount of fat and cholesterol we eat and we still get the grow power we need.

When we eat protein from vegetable sources we need to plan our meals very carefully so we get all the body building blocks we need.

By eating some vegetable protein, we make available more food for other people in the world. What we can do is open the children up to choices of protein other than animal proteins.

Teacher Background

Proteins are digested into amino acids. Essential amino acids are those that must be supplied in the diet. Non-essential amino acids may be made by the body from the essential amino acids. "Proteins are classified as complete or incomplete according to the amount of the eight essential amino acids they contain. Complete proteins are those that contain all the essential amino acids in sufficient quantity and ratio to supply the body's needs. These proteins are of animal origin - meat, milk (cheese), and eggs." (To avoid confusing the children, milk and milk products should not be discussed in this lesson).

"Incomplete proteins are those deficient in one or more of the essential amino acids. They are of plant origin - grains, legumes, nuts. In a mixed diet, animal and plant proteins compliment one another. Grains and legumes also compliment one another." By combining proteins, the correct ratio and kinds of essential amino acids needed by the body can be provided. "In order to perform efficiently in the body, complimentary proteins should be eaten at the same time.

Examples of Complimentary Proteins:

1. Rice + legumes
2. Rice + wheat + soy
3. Rice + sesame seed
4. Rice + milk
5. Wheat products + milk
6. Cornmeal + beans
7. Beans + milk
8. Wheat + beans
9. Peanuts + milk + wheat

This concept is difficult to teach to children as both plants and animals give us protein. This information may be used for your information.

Materials

Food Models
Game materials for construction

Learning Experiences
Food Activities

1. Look in the kitchen for protein rich foods. Bring these foods to the classroom and talk about their grow power from animals or vegetables. Use as many of the foods as possible to prepare as a snack or part of a meal.

   Examples: Eggs
   Beans
   Peanut butter
   hamburger
   ham
   sunflower seeds

2. Separate these items into animal and vegetable source. If a particular culture or religious group is associated with that item talk about its origin.

3. Observe changes in the food items from raw to cooked and cold to hot.

4. The children can help make these changes and prepare the foods as snack or part of a meal. Our consumption of meat and meat alternatives are representatives of cultural, religious, and personal heritage. Expose the children to a variety of protein rich foods representative of various cultures.

   Examples are: pigeon, rabbit, squirrel, turtle, chitterlings, bear, wild game birds, venison, elk, fish and eels, duck, ham hocks, pigstail, pigs feet, black beans, pinto beans, tacos, enchiladas, and shellfish.

5. Prepare an ethnic protein rich food as a snack or part of a meal.

Non-Food Activities

1. Discuss that we get protein from animals. Use food models of protein foods from animal origin and help the children to identify the food. Large posters with pictures or drawings of farm animals and packets for small meat pictures when each may be appropriate for identifying the foods and animals by the children.

   The Children may be interested in the connection between names of the meat and what animal it comes from. Discuss how it is part of a nature for one animal to eat another animal as part of the food chain. Humans can choose to eat animals or they can choose to eat only vegetable sources of protein.

2. Play Protein Rich Concentration to reinforce what foods are rich in protein. Protein Rich Concentration is included in this unit.

   The children may assist in selecting the food pictures and constructing the game.

Reinforcement Activity

1. Visit a meat market or meat display at a local grocery store. View the meat in a variety of cuts, packaged, and cooked forms. Discuss the changes and differences you notice. Observe the butcher cutting the meat.

2. Play the "Protein Rich Concentration Game" or "Go fishing Game With Protein Rich Foods."

3. Add the new foods tried to the child's new food chart.

4. Add the protein foods to the food train to give grow power to your food groups.

Information for the Parent/Guardian

1. Animal and vegetable sources provide us with protein rich foods.
2. Cultural recipes used in the center.
3. Instructions for the Protein Rich Concentration Game.

Additional Resources

Creative Food Experiences for Children

Mary T. Goodrum and Gerry Pollen
Center for Science in the Public Interest
1755 S. Fourth Street N.W.
Washington, D.C. 20009

More Than Graham Crackers, NAEYC, 1834 Connecticut Ave. N.W., Washington, D.C. 20009, pp. 63-73.

PROTEIN RICH CONCENTRATION GAME

How to construct:

On one side of cards attach a picture of a food item, protein rich or non-protein rich.

Examples:

Protein Rich	Non-Protein Rich
Chicken	Lettuce
Fish	Apple
Pinto beans	Bread
Eggs	Green beans
Peanut butter	Carrots
Peas	Orange
Hamburger	Banana
Ham	Radishes
Sunflower seeds	Grapefruit

On reverse side of cards, attach a small square of construction paper. The color chosen should be the same for all the protein-rich foods and different from the color(s) used on the non-protein rich foods. You do not need to have the same number of protein-rich and non-protein rich foods, though there should be an even (not odd) number of each. Match the colors with the colors on the food train cars.

How to play:

Place the cards food model side up. Have the children take turns picking out two cards at a time. The child should name the food rather than point. He/she should say whether it's rich in protein or not. The child may then turn the cards over. If protein foods have been backed by (green) squares, and the two cards chosen are both (green), the child may keep the cards. If the colors are not protein colors, the cards should be turned food model side up and remain on the table.

FOODS TO USE WITH CARE

Goals

1. The children will be aware of the fifth good group foods.
2. The children will demonstrate the ability to use the foods of the fifth food group with care.

Intended Learner Outcomes

1. The child will recognize foods in the fifth food group.
2. The child will consume the foods in the fifth food group with care or not at all.

Introduction

A fifth food group is now recognized by the United States Department of Agricultural (USDA). Refer to the article Nourishing Notes in this unit for information.

Materials

A sample of fifth food group foods available and visible in the kitchen.

Learning Experiences Food Activities

1. Explore in the kitchen. Identify as many foods as possible from the fifth food group.
2. During the next week avoid serving foods from this food group. Make a list of foods in this group and post it in the eating area. Have the children place a star by the extra food each time they realize it is not being served with a meal or snack. Place an X or other symbol when the food is served.

Non-Food Activities

1. Think about how foods in this fifth food group are used. Are they associated with celebrations and parties, bribes or good behaviors. What other foods could be replaced for a food in this group used at one of these celebrations.
2. The foods in the fifth food group are sources of immediate energy. What other foods found in our food train provide energy? Which one would you like to eat best?

Reinforcement Activity

1. Add these foods to the food train appropriate car.
2. Prepare with the children a list of foods in this group. Duplicate this list with their words

as to why it is advised to eat these foods with care. Send this list home to parents or post in a visible area in the day care facility.

Information for the Parent/Guardian

1. Send home the nourishing notes page of this unit explaining the fifth group.
2. When viewing television food commercials targeted at young children, watch for the advertizing and frequency of these fifth food group items. How many do you count in the length of time you are viewing television?

Additional Resources

FOOD

Consumer Education Center,
Dept. 693 G
Pueblo, Colorado 81009
Publication No. 544H.

AND THEN THERE WERE FIVE!

By Karen West

After years of public eduation most Americans recognize the FOUR BASIC FOOD GROUPS - the vegetable and fruit group, the bread and cereal group, the milk and dairy products group, and the meat and meat alternates group. Now the United States Department of Agriculture (USDA) has added a fifth group - the fats, sweets, and alcohol group. Unenriched, refined bakery products are included here, too.

Why is the fifth food group necessary? How is it useful? Think back to what you tell the children when they raise questions about fats and sweets. Did you call the candy bars, jam, and unsweetened drinks junk food or non-foods? Or did you refer to them as special treats or rewards? The children know that these substances are foods because they eat them, they taste good, and they make the children feel "full."

But children also know there is a lot of emotion connected with these foods. They see "big kids" stuff themselves with high fat snack foods, they watch adults use alcohol to alter they moods, they watch all ages of people use colas as stimulants. The children also associate these foods with celebrations and parties. They sometimes learn, too, that fats and sweets are offered as bribes for good behavior.

You can remove some of the mystery and allure of these "forbidden fruits." From the beginning, help the children look at these foods as sources of energy - calories are burned in the body to create energy - but as offering little else to growing bodies. (Vegetable oils are an exception. They generally supply Vitamin E and essential fatty acids so small quantities are needed in the diet.)

Foods from the fifth food group (alcohol excepted, of course) are considered "additional foods" for the Child Care Food Program. They may be served IN ADDITION to the balanced diet of foods from the first four food groups. They can add flavor, variety, and a sense of satiety (fat makes the hunger pangs stay away longer). But, if not served in appropriate quantities or ways, fats and sweets can crowd out the nutrient-rich foods in the children's diets.

Given the choice, many children will fill up on foods from this fat and sugar food group and leave the nutrient-rich foods on their plates. This may reflect family eating habits; it may also reflect the apparently addictive nature of refined sugar. But a nutrition-conscious child care provider will see that foods from this fifth food group are only offered when they enhance the children's consumption of the nutrient-rich foods. For example, a small amount of salad dressing may encourage children to eat more of their mixed green salad. Or a bit of jam or honey on the enriched biscuits, or muffins may make these foods attractive to young appetites. Use foods from this fifth group wisely. Educate the children to the difference between nutrient-rich and nutrient empty calories.

WORTH WRITING FOR: FOOD, a handsome new booklet from USDA. The first several hundred thousand copies are available free on a "first write first served" basis.

Order by writing the:

Consumer Education Center
Dept. 693 G,
Pueblo, CO 81009

and request: Publication No. 544H

Source: Child Care Resources, May, 1980

UNIT II

A VARIETY OF WHOLESOME FOOD CONSUMED IN ADEQUATE AMOUNTS WILL ASSIST IN MAINTAINING IDEAL WEIGHT AND PREVENT OVER CONSUMPTION OF FAT, SUGAR, AND SODIUM

Menu planning and food choices are necessary in providing adequate nutrition for the pre-school child. Food likes, dislikes, and attitudes are formed early. Therefore early involvement of the young child in food choices and menu planning techniques is relevant to their later food choices, proper growth, development, and attitude about food.

The lessons in Unit II offer snack and lunch planning with the children.

Some of the more effective learning occurs when the children plan, prepare, and eat their meals cooperatively with the cooks, teachers, aides and visitors.

Goals

1. The children will be more aware of nutritious foods that aid in their development and growth.
2. The children will gain experience in selecting the amounts of food eaten to meet their growth and energy needs.

Intended Learner Outcomes

1. The children will recognize protion sizes for their growth and energy needs.
2. The children will be able to identify a variety of foods that will be of adequate amounts for their size and age.
3. The children will gain experience with a variety of foods.

Introduction

Nutritious foods aid in children's growth and development. As children learn how foods help them grow, they may be more often choose foods that offer more nutrients than more calories.

As children develop an understanding of their growth rate and energy needs they can begin to make judgments about the quantities of nourishing foods it is appropriate for them to consume.

Obesity is a common nutritional problem in the United States. For many people, the roots of obesity lie in the eating habits and food preferences they acquired in their youth. Learning proper serving sizes as well as which foods are high in calories and low in other nutrients can lead to healthy eating habits.

Materials

Food for place settings:

Nutritious and non-nutritious foods
Basic Four Card Game
large paper
pictures of food
food models

Learning Experiences Food Activities

1. Read the story Goldilock's and the Three Bears. Look at the different sizes of food for the different bears.
2. Prepare 3 table settings. Follow the Three Bears story through with this exercise:

a. $^1/_8$ cup milk in glass
small piece of lettuce in bowl
1 pea, 1 sliver apple, $^1/_4$ peanut butter sandwich on plate

b. $^3/_4$ cup milk in glass
$^1/_4$ cup lettuce, shredded, in bowl
$^1/_4$ cup peas, $^2/_4$ cup apple, $^1/_2$ peanut butter sandwich on plate

c. $1^1/_2$ cups milk in glass
head of lettuce in bowl
1 cup peas, 1 apple (4 quarters), 1 large peanut butter sandwich on plate. Serve on a large serving platter.

Have the children line up behind the place setting they liked best for their lunch. Let the children eat that size portion or their lunch. During and after lunch discuss how they felt and how much more or less they decided they wanted. What portion would you choose next time?

2. Display a sample of attractive foods. Have children separate the foods into those that have lots of different nutrients and those that offer only calories.

These foods may then be placed in the appropriate food train cars. How much of these foods would you like to eat?

Sample foods:

Nutritious Foods	Non-Nutritious Foods
Orange	Potato Chips
Milk	Candy Bar
Whole Wheat Bread	Soda Pop
Apple	Cookies
Cheese	Cake
Hard Boiled Egg	

Non-Food Activities

1. Draw body outlines on large paper. Discuss what is needed for growth and have children draw or cut and paste pictures of nutritious foods in their "stomachs".

2. Compare children's baby pictures to how children are now. To suppliment the baby pictures have the parents tell how many pounds and how many inches they were at birth. Make a strip of

paper that long to compare with current length. Show comparison of weights on a chart. Give the parents at least one week's notice to supply this information to you.

3. Discuss differences and what helps children grow (nutritious food, water, shelter, love, air, sun, exercise, rest).
4. If a parent has a baby, compare the baby to the children and teacher/ parent.
5. Measure each child every two months. Keep a growth chart on each child.
6. Have children select foods from the food models or cut magazine pictures to demonstrate foods that are healthy for them. Make a collage of foods that are good for children.
7. Have children play Five Food Groups Card Game included in this lesson.

Reinforcement Activity

1. During snack and meal time allow the children to serve themselves with the guidance of an adult. Discuss amounts of food taken; amounts of food consumed and not consumed; types of food not selected and how hungry am I before and after eating.
2. Look at food left on the plates at each child's table. Talk about how one knows how much food to take.
3. Prepare a "make your own salad" table. Allow children to make their own selection of salad items and amounts. Discuss their choices and likes of preparing their salads.
4. Have a prepare your own pizza and make your own sandwich table for another day's lunch.

Information for the Parent/Guardian

1. Nutritious foods from the basic four food groups provide vitamins, minerals and other nutrients as well as calories needed for growth and development. Concentrated sweets such as candy, cookies, sweetened fruit drinks (not juices) and sweetened carbonated beverages, and high-fat snack items such as chips contribute mainly calories and few nutrients needed for growth and health.

2. All food (except some man-made foods) has calories. A calorie is a measure of the energy that food produces. Everyone needs calories for growth, maintenance, and activity. If the calories consumed are not burned up in growth or activity, the excess is stored as fat.

   The U.S.D.A. has set guidelines for the serving size of food for children according to age. Some children may need more or less according to individual needs.

   Favorite foods from any of the five food groups can be used for celebrations, special occasions, and when the child has established good habits of eating alot of wholesome, nutritious foods. The foods in the fifth food group should be in addition to, not instead of nutritious foods. This follows the USDA model stating that the meal pattern must be served but additional foods may be served.

3. Tooth decay is caused by the sugars and starches in foods reacting with the plaque (made of bacteria) on people's teeth. This reaction forms an acid which attacts tooth enamel and causes decay. These attacks last around 20-30 minutes and occur each time a sugar-filled snack is eaten. Ice cream, candy, cakes, cookies, and sugar sweetened beverages cause problems when eaten at many different times during the day. On the other hand, coarse foods such as raw vegetables help clean the teeth. Controlling sugar intake, frequent brushing and flossing along with regular visits to the dentist are the important aspects in good dental health.

4. U.S.D.A. meal pattern requirements.

5. Involvement of parents with growth charts, comparison of how we grow, and food selection promoting adequate nutrition for the child.

   Send home comparison charts from non-food activity 2.

6. Five Food Groups Card Game instructions.

Additional Resources

Nutrition in a Changing World
Penn State University
University Park, PA 16802

Dairy Council Food Models
National Dairy Council
6300 North River Road
Rosemont, IL 60018

Dental Care for Kids
AV Library Service
University of Minnesota
3300 University Ave. S.E.
Minneapolis, MN 55414

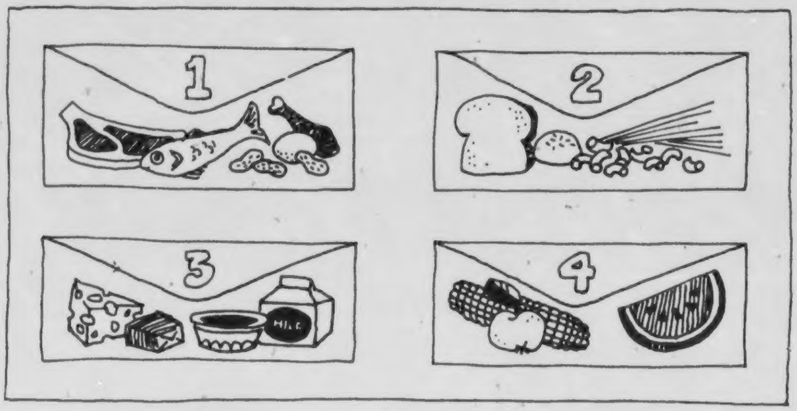
Local Buying Guide for Child Care Centers
FNS-108
U.S. Government Printing Office
United State Department of Agriculture
Food and Nutrition Service
Washington D.C. 20402

FIVE FOOD GROUPS CARD GAME

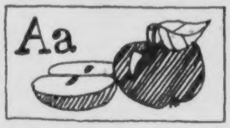
Construction Instructions: You need
26 index cards (a colored shade for each food group)
1 poster board
4 envelope pockets
pictures of food

How To Construct

1. On poster board paste four envelopes. Place pictures of each food group on the envelopes. (1) Meat/Meat Alternative; (2) Breads, Cereals, and Grains; (3) Milk; (4) Fruits and Vegetables; (5) Fats, Oils, and Alcohol.



2. On each index card place a letter of the alphabet and a picture of a food beginning with that letter.



How to play: The child selects an alphabet index card, identifies the picture and/or letter and places it in the appropriate food group envelope on the large poster board.

The cards may also be used to plan a snack or meal or discuss likes, dislikes and familiarities of foods. Remember the food train and sort the cards into the appropriate cars of the train.

This Game Teaches: Colors
Alphabet
Food Groups

Reprinted with permission from the:

Three Generation Sharing Pre-School
105 1/2 University Road
Cloquet, MN 55720
Funded by Title IV C. ESEA

HEALTHY SNACKS FOR HEALTHY BODIES

Goals

The children will learn to choose snacks that contribute to good health.

Intended Learner Outcomes

The children will demonstrate the skill of planning a balanced snack for healthy eating.

Introduction

Snacks are an important part of a child's daily food intake. Often children's stomachs are too small to hold all that is needed at a meal. Snacks should be chosen wisely so they contribute nutrients children need for growth and health. Using the USDA Guidelines for snacks for pre-schoolers, children can begin to select appropriate snacks.

Materials

Daily Snack:

Paper plates or white placemats
Snack foods meeting the USDA Guidelines
Utensils and materials for snack preparation
USDA Meal Pattern Guidelines

Learning Experiences Food Activities

1. Prepare a snack. During the snack preparation and eating the following questions may be asked by the child care provider or the child. You may ask:
   What is this food? Do you like to eat this food?
   Is this the first time you have eaten this food?
   Will you eat this food again for a snack?

2. Prepare a "select a snack" table. Offer snack items that meet the USDA Snack Guidelines. Allow children to select and prepare the snack they want to eat. Discuss the choices the child makes and relate their selection to the Snack Guidelines. Hook up two of the food train cars that make up the snack. Place foods in the appropriate cars.

   The children may be capable to pour, mix, shake, slice, and spread soft onto firm when preparing their snack. This is an opportunity to reinforce the skills needed in food preparation and eating.

   Pouring
   For pouring, mark a one pint plastic glass with a line midway around it or mark it with a rubber band and ask the children to pour from a small one pint pitcher with a cover filled with water

up to the line on this glass. Show them how to hold the pitcher in their right hand, placing their left hand under the spout to guide and control the speed of pouring. (Reverse position of hands if child is left handed.) Start pouring lesson over a cake pan or over the water table.

Shaking

Shaking is a form of mixing but one which requires more vigorous activity and should be introduced after other types of mixing have been tried. For shaking show the children how to push up with a bottom hand while holding firm with the other hand, then reversing the process by pressing down while holding firm with the under hand. It is more complicated than many of us realize.

Spreading

To help the children learn the skills of spreading soft onto firm, show them how to hold the knife and explain that whatever is to be spread must be pulled gently across the surface rather than pushed down. Show children how to grasp the knife with the thumb and index finger resting the handle inside the palm, then hold the elbow still and rotate the wrist to get the proper motion. This works easier than grabbing the knife with the whole fist.

Non-Food Activities

1. Using food models or food pictures appropriate for snacks, allow children to plan a snack on a placemat or paper plate. The food items may be pasted to the placemat or paper plate and taken home. If the food is available, have the child match the food models to the real food and then eat the snack they planned and prepared.

2. Have the children interview one another by conducting a survey on food likes and dislikes; food preferences by culture, religion or personal choice and allergies. The teacher would be the recorder.

3. As a group, plan a snack with food models or pictures. Present the snack suggestions to the cook and determine if that snack meets the USDA Guidelines. If appropriate, prepare the snack as a group cooperatively with the cook's assis-

tance. If there are snack food ingredients available for use immediately in the kitchen, this activity could occur immediately.

4. Construct a healthy snack mobile or bulletin board with the children. The children may select and cut the food pictures and assist in constructing the mobile or bulletin board.

5. Read "Dandelion, The Lion Who Lost His Roar" by Rose Stoia. Discussion:

   What foods made Dandelion lose his roar?

   What foods helped him get his roar back?

   How would you feel if you ate only candy?

Reinforcement Activity

1. Plan a snack meeting the USDA Guidelines or visit a local grocery store. The children select the food needed to prepare the snack for the children in the group. Return to your center, prepare the snack and eat it. The children may select, carry the snack items, and sample their snacks. Discuss the planning and selecting process. Discuss the foods selected or how you like these foods.

2. Cut pictures of good snack foods from magazines. Construct a puzzle from the pictures that may promote a game for the child to guess what that snack item is. The strength of the puzzle will increase by laminating it or transferring it onto a heavy cardboard.

Information for the Parent/Guardian

1. More and more, Americans are snacking more and eating meals less. The snacks should contain some nutritional value if children are to get all the vitamins and minerals that are needed.

2. Snack menus used in your center listed for use by the parent/guardian at home with the child.

3. Recipes and plans for the "Select a Snack" table plan.

Additional Resources

Dandelion, The Lion Who Lost His Roar by Rose Stoia
41654 Fowler Drive
Bellbrook, OH 45305

USDA Meal Pattern Guidelines

Snacking Good: Recipes for Mom's and Kids
Dairy Food and Nutrition Council of Minnesota
Hillsborough Office Bldg. No. 1, Suite 220
2353 North Rice Street
St. Paul, MN 55113

PLANNING LUNCH

Goals

The children will experience planning a balanced lunch promoting healthy eating.

Intended Learner Outcomes

The children will demonstrate their ability to select a good nutritious lunch pattern.

Introduction

Once the children have been exposed to a variety of foods, they need to be aware how to combine these foods into a balanced diet for good health. Using the USDA Meal Pattern Guidelines for lunches, children can learn how to plan their own lunch.

Materials

Daily Lunch
    Lunch foods selected from the lunch planning session.
The Good Health Train Story
    Paper bags
    Pictures of foods from labels and magazines
    Parent Letter

Learning Experiences
Food Activities

1. For lunch let the children serve themselves from serving dishes located in or next to the food train cars. This helps them learn what food group the food is from. Identify the foods and their food groups that are offered for lunch. Talk about the variety of textures, colors, tastes, smells, and appearances of each food. Ask:

   What do you like best about the different foods?

   How do the colors, smells, and tastes differ?

   What other foods could you eat for lunch?

2. Plan a lunch cooperatively with a food service staff. Prepare all or a portion of the lunch as a group or in small groups each preparing an item for the lunch. Emphasize the child's planning and preparation involvement and learning about the utensils and food preparation techniques as the food item is prepared.

   Obviously these skills can also be taught by preparing real food. Suggested recipes may include:

- wrapping: baked potato, hot dog wrap around
- mixing, shaking: banana and wheat germ, cocoa, cole slaw, jello with fruit
- spreading: butter on bread, stuffed celery, lettuce roll with peanut butter
- pouring: juice or milk

Children can also mix, tear, wash, and cut (with a tongue depressor or plastic knife with supervision), grate with a mouli grinder, or blend.

Non-Food Activities

1. Re-read the "Good Health Train", children may act out the story to separate the food items into groups or to be aware of what foods are offered in each group.
2. Make a paper bag puppet to resemble good lunch items.
3. Compile a cookbook or menu list of the lunches served at the center. Share this with the child and their homes. The teacher may be the recorder as the children report their foods.

Reinforcement Activity

1. With the assistance of an adult complete the "Sample Letter Home" included in this unit and send it home with the child.
2. Plan a lunch, meeting the meal pattern requirements. With the assistance of the cook, select or purchase the food needed for the lunch. This may be accomplished by a special trip to a local grocery store with the children.
3. Visit a restaurant kitchen when lunch is being served. Observe what foods are being prepared, how they are served and the menu offered to the restaurant guests.
4. Visit a large school or institutional kitchen when lunch is being prepared or packaged.

Information for the Parent/Guardian

1. Send the letter home to explain what meal was planned and request that the family prepare that meal at home.
2. Puppet instructions.

3. Lunch cookbook or menu list.

4. Send home the new foods list compiled during the previous unit. Ask the parents for feedback next week at pick up or drop off time for which of those foods have been served at home? Have other family members accepted the new foods? Has the child's eating habits changed at home? This feedback may be on a continuing basis.

5. Invite parents and/or grandparents to eat lunch with you at the center.

6. Plan a potluck lunch or dinner.

Additional Resources

USDA Meal Pattern Guidelines

The Mother-Child Cook Book
By Nancy J. Fereina
Pacific Coast Publishers
Menlo Park, CA 94025
1969

Puppet

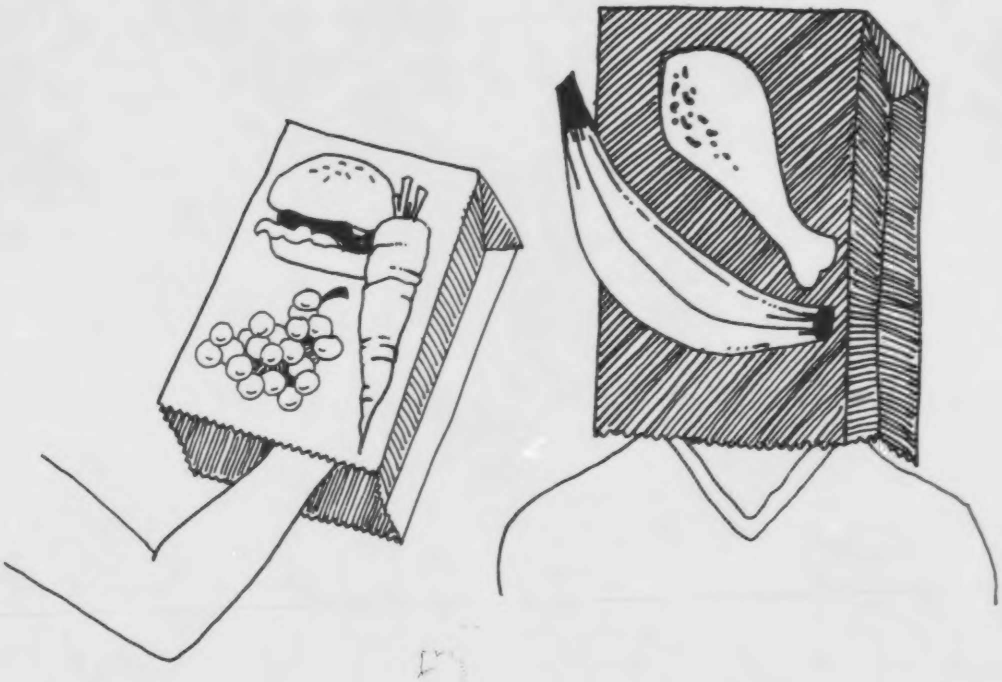
1. Make a paper bag puppet to resemble good lunch items.

   A. Save this hand puppet to show the children in your center, so when you are ready to do this activity with them they can see what you want them to do.

   B. When the children complete the lunch time puppets have them sit in a circle (you included) and tell something about their food puppet.

Suggested Questions:

1. Why did you choose the lunch on your puppet?
2. Are your foods raw, ready to eat, or have to be cooked?
3. Is it your favorite food?
4. Are your foods always this color?
5. Do you have it at home or at the center or both?
6. Do you know where the foods come from or how they are made?



SAMPLE LETTER HOME

Dear ________________,

Today we planned a nutritious meal. In my meal I planned to have __________

____

____

____________________. Do you think we could have this to eat some day soon?

Your child,

Meal Patterns for Children in Child Care Programs

	Ages 1-3	Ages 3-6	Ages 6-12
LUNCH OR SUPPER			
Milk, fluid[1]	1/2 cup	3/4 cup	1 cup
Meat or meat Alternate:[6]			
Meat, poultry, or fish, cooked[7]	1 ounce	1 1/2 ounces	2 ounces
Cheese	1 ounce	1 1/2 ounces	2 ounces
Egg	1	1	1
Cooked dry beans or peas	1/4 cup	3/8 cup	1/2 cup
Peanut butter	2 tablespoons	3 tablespoons	4 tablespoons
Vegetable and/or fruit[8]	1/4 cup	1/2 cup	3/4 cup
Bread, enriched or whole grain[2]	1/2 slice	1/2 slice	1 slice

---

[1] Includes whole milk, lowfat milk, cultured buttermilk, or flavored milk made from these types of fluid milk which meet State and local standards.

[2] Or an equivalent serving of an acceptable bread products made of enriched or whole grain meal, or flour, or enriched or whole grain rice or pasta. See listing in FNS-64, A Planning Guide for Food Service in Child Care Centers, for serving sizes of acceptable bread/bread alternates.

[6] Or an equivalent quantity of any combination of foods listed under Meat or Meat alternates.

[7] Cooked lean meat without bone.

[8] Must include at least two kinds.

UNIT III

FOOD USE IS RELATED TO THE CULTURAL, SOCIAL, PSYCHOLOGICAL, AND PHYSIOLOGICAL ASPECTS OF LIFE

Food is more than just nourishment for our bodies. It is also the focal point of family gatherings, of traditional ethnic celebrations, and personal health situations.

In these lessons the children have experiences that allow them to learn how other people influence the food choices and habits of children.

WHO DECIDES WHAT YOU EAT?

Goals

1. The children will become acquainted with advertising messages directed at them on television, in magazines and newspapers, on billboards and the sides of trucks, and in supermarket advertising.
2. The child will gain an understanding for the reason why foods are liked or disliked by some people.

Intended Learner Outcomes

1. The child will be aware of what food messages they see and hear around them.
2. The child will be aware of foods eaten by others that they have never eaten.

Introduction

Advertisements affect our food choices. There are words, pictures, and items that promote eating foods. Some of the advertising devises used to influence our food choices are:

1. Testamonials by well known people.
2. Words such as "fortified" and "all essential vitamins" that are not fully understandable.
3. Prizes, coupons, send away items.
4. Phrases such as "tell your mom right away to buy..."

Materials

Advertised cereals
Foods prepared in two or more ways
Various food labels
Various food boxes, cans, packages, and posters from the grocery store.

Learning Experiences
Food Activities

1. Display a selection of cereals most advertised for children. Watch television at children's prime time to be aware of what cereals are most advertised. Allow children to sample the cereals. Discuss the advertisement, how may children eat this cereal, do you like this cereal?
2. Read the ingredients from the cereal box to the children. Explain that the first ingredient is the one contained in the highest quantity, the second is next. Most of the heavily advertized cereals will have sugar second. Show the

children a chart of how many teaspoons of sugar are in the various foods. Vicki Lansky's book Turning of the Candy Monster has an excellent chart has an excellent chart. Your local dentist may also have a chart for loan.

3. Have children identify which of the heavily advertised foods are in the fifth food group. Then identify the foods that are nourishing. Place these ads in the appropriate car on the food train. Are any of the cars empty?

4. Have the children make their own ads for nutritious foods and present to the group. Ads may be made for apples, whole grain bread, etc.. The ads may include drawings, creative dramatics, child interviews, and use of a food product or packaging.

Non-Food Activities

1. Make a list of favorite foods of each child. Evaluate this list and include the nourishing food favorites in the meal pattern at the Child Care Center. Emphasize that this food is a favorite of this child. Question if it is a favorite or not a favorite of other children.

2. Look at labels and magazine ads. Identify which ones the children recognize by color, picture and/or words. Cut them out and make a collage. Suggestions for a collage are nourishing food ads, heavily salted food ads, sweetened food ads.

3. Guide the children in acting out and dramatizing their own commercials for wholesome foods. Puppets may be used in this activity and dialogue with action.

Reinforcement Activity

1. In a group make a list of all the foods you see advertised on television or in other places.

2. If your environment provides the opportunity, take a walk outside and discuss advertisements or billboards, trucks, benches, windows, etc. See how many you can find that are food advertisements. This activity may also be accomplished by visiting an appropriate television show where commercials are included or through magazines.

Information for the Parent/Guardian

1. Help the parent/guardian be aware that advertisements do affect the child's food choices and early learning.

2. Involve the parents in the child's food likes and dislikes. Also raise awareness with the parent/ guardian as to the influence of media and other people on the child's food choices and attitudes.

Additional Resources

Creative Food Experiences for Children
Mary T. Goodwin and Gerry Pollen
Center for Service In the Public
 Interest
1755 South Street N.W.
Washington, D.C. 20009

Taming of the Candy Monster
Vicki Lansky
Meadowbrook Press
16648 Meadowbrook Lane
Wayzata, MN 55391

CELEBRATING WITH FOOD

Goals

The children will learn that special foods are associated with certain holidays, festivals, and celebrations in various groups of people.

Intended Learner Outcomes

The children will be exposed to several new foods and will taste at last a few them. They will demonstrate awareness of connection between special foods and special events and different groups of people.

Introduction

Certain foods are associated with special occasions and holidays. Our attitudes are formed at an early age by participating in the celebrations peculiar to our families and cultural heritage. As child care providers, we can expose children, and their families, to a variety of special foods from different traditions and cultures.

Materials

Pictures of families and friends eating.
Seasonal books and magazines with eating scenes.

Learning Experiences
Food Activities

1. Plan a special occasion with the children. It may or may not be associated with a holiday. Offer nutritious foods at the party. For example: arrange juice punch, vegetable sticks, cheese dip, stuffed dates with cream cheese, bananas rolled in wheat germ, fruit or grain muffins, oatmeal-raisin-applesauce cake.

2. Invite someone from the community to prepare a special food used in his/her culture. Let the children help in the preparation of the food if possible, explore any new foods or spices used in the recipe, and then taste the finished product. Request the guest to tell something about the customs surrounding the food and the special occasion when it is served.

Non-Food Activities

1. Display pictures of families and friends eating particularly holiday or special occasion foods and meals.

2. Discuss the foods you see the people eating. Are they the foods you eat for that occasion?

3. Allow the children to suggest other foods that may be eager for that holiday or special occasion.

4. On each holiday prepare and taste a food with the children. Use one food that is typically served on that occasion by families in your community. Learn what holidays are celebrated by the families in your community by a survey sent home to the parents of the children in your child care center.

Reinforcement Activity

1. Act out in a short play the planning, preparation, and eating of a special food for a special occasion. If the equipment is available, video tape and play back to the families of the children.

2. Have the children survey their parents of foods severed for special occasions and cultural heritage at home. Have the children share this information in the group with the child care provider being the recorder. Duplicate and send home this list with the children. Cut one page of the list apart and put the foods listed in the appropriate food train car. This offers suggested uses of foods associated with certain holidays, festivals, and celebrations.

3. Visit a deli, ethnic speciality store, or grocery store. Observe the food featured for special occasions and holidays.

Information for the Parent/Guardian

1. Encourage the children to share food experiences from their own family background. There are some celebrations that the children may share together. Cultural celebrations are a great way to understand, appreciate, and enjoy our own traditions as well as others. Invite the parents to plan a special event at the center reflecting their cultural heritage and foods.

2. Share recipes and special occasion ideas used in the center. These may be used at home. Invite the parents to share recipes with the center cook.

Additional Resources

Creative Food Experiences for Children
Mary T. Goodwin and Gerry Pollen
Center for Service in the Public
 Interest
1755 South Street N.W.
Washington, D.C. 20009
pages 140-149

V. Kositsky. What in the World is Cooking in Class Today? Multi-Ethnic Recipes for Young Children "Young Children 33 No. 1 (November, 1977): 23-31.

H. Merdes, The African Heritage Cookbook. New York: Macmillan. 1971.

Pueblo Indian Cookbook. Museum of New Mexico Press, Box 2087, Santa Fe, NM 87501. 1972.

Ramsey, P. "Beyond Ten Little Indians' and Turkeys: Alternative Approaches to Thanksgiving". Young Children 34, No. 6 (September, 1979): 28-32, 49-52.

PEOPLE, CULTURES, AND THEIR FOOD

Goals

To create an awareness of many fruits, vegetables, baked goods, and meals which are representative of American ethnic groups or other cultures.

Intended Learner Outcomes

1. The children will be aware that other people do eat differently and will become acquainted with one or more of those different foods.
2. The child will be more aware of the foods representative of their cultural heritage.

Introduction

Children need to feel a sense of belonging, to know their roots and heritage. Having the children share any special customs and ethnic foods creates a learning experience for all the children. This awareness of one's cultural also strengthens the links between the child and the older generations in their families. We are examples of our ethnic heritage in all we do including our food choices and eating behavior.

Materials

Globe
Ethnic food variations
Pictures of children from a variety of cultures
Resource relatives and friends

Learning Experiences

Food Activities and/or Non-Food Activities

1. Introduce foods from around the world. Display foods representative of other countries. Examples may be: tortillas, pomegranates, and mangos.

   Explain that these came from other countries and we can eat them too. Associate using pictures of children around the world and the globe to the foods displayed. Taste the foods displayed discussing the types of foods; tastes, smells, etc.; and give origin of the food.

2. Visit a store featuring traditional ethnic foods. Plan a tasting party to sample a variety of ethnic foods.
3. Invite a parent, grandparent, or friend from a different ethnic background to talk with the children about their traditions and customs. This may include to food being served at a tasting party or as a snack or meal.

4. Show and discuss mealtime eating styles in other parts of the world. For example: using chop sticks, sitting on the floor, use of fingers, holding the knife and fork differently, etc.

Reinforcement Activity

1. Visit an ethnic store or an ethnic restaurant. Observe the food displayed, method of preparation and method of serving.

2. Prepare an ethnic meal at your center. Make allowances for room arrangements, decorations, serving, and eating styles.

Information for the Parent/Guardian

1. Encourage familiarity with foods introduced by various cultural groups. Your acceptance of various cultural foods will assist the children in accepting themselves and their cultures.

2. Compile a recipe book or list of foods from the ethnic backgrounds representative in your community.

3. Involve the parents in sharing their ethnic food recipes with the center cook and talking with the children.

Additional Resources

Embassies or Consulates
(address them to country name)
Embassy, Washington, D.C.)

Eating and Cooking Around the World
by Barry Erick
John Day Co. New York, 1963

Creative Food Experiences
By Mary T. Goodwin and Gerry Pollen
Center for Service in the Public
Interest
1755 South Street N.W.
Washington, D.C. 20009

Ethnic Organizations in your community

Ethnic restaurants in your community

SUMMARY

In these units we have presented nutrition education activities using food and non-food alternatives.

It has been our goal to expose the young child to a variety of foods, food preparation styles, and experiences related to food and nutrition.

As adults we are examples for the young child to learn from. It is our challenge to provide them with a positive experience in food selection and food consumption by the food we make available and the experiences we offer for their involvement.

Our focus then, is on healthy living and raising nutrition consciousness of children, parents/guardians and the community that child is a part of.

Students
Parents
Educators
Administrators
Children

for **NUTRITION**

WORKSHOP & RESOURCES

SECONDARY Teacher

a cooperative adventure in preschool nutrition education

Minneapolis Board of Education
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Joy M. Davis W. Harry Davis Judith L. Farmer
Philip A. Olson James W. Pommerenke Jane A. Starr

Superintendent of Schools
Richard R. Green

Special School District No. 1
MINNEAPOLIS PUBLIC SCHOOLS
MINNEAPOLIS, MINNESOTA

An Equal Opportunity School District
1980

Project Funded by: Nutrition Education Demonstration Project Grant
U.S.D.A., Food and Nutrition Service
Grant #USDA-FNS-59-3198-8-28

Minneapolis Public Schools
1980

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ACKNOWLEDGEMENTS

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Minnesota State Department of Education
Karen West, Editor
Chris Wold, Artist

Typists: Nancy Stine
Mary Louise Gay

Rationale

The secondary and post secondary student nutrition curriculum is designed to introduce students to nutrition principles and to apply those principles to activities with pre-school children and themselves. In this workshop the secondary teacher is presented with the same principles and given an opportunity to use one of the unit sections for implementation into their classroom. The format for this workshop is thus based on the understanding that teachers are more likely to present new curriculum to their students when they have had experience with it and that students often benefit from the enthusiasm generated when teachers have an opportunity to work and learn together.

Suggested workshop time: 2-2$^1/_2$ hours

U.S.D.A. and H.E.W. Guidelines for Healthy Eating

1. Eat a variety of foods.
2. Maintain ideal weight
3. Avoid too much fat, saturated fat, and cholesterol.
4. Eat foods with adequate starch and fiber.
5. Avoid too much sugar.
6. Avoid too much sodium.

Goals

1. To increase understanding about the wide variety of foods that supply the nutritients needed for growth and development.
2. To increase awareness of how habits and attitudes toward nutrition are formed.
3. To acquaint teachers with the secondary nutrition curriculum.
4. To encourage the teachers to plan classroom management before teaching the nutrition unit.

Intended Learner Outcomes

1. The teacher will be able to recognize a well-balanced meal and adequate portion size for a young child and for an adult.
2. The teacher will be able to identify ways young children's and secondary student's habits and attitudes toward nutrition are formed.

3. The teacher will be able to plan the organization and management of the classroom for teaching the nutrition unit.

4. The teacher will be aware of the content of the five sections in the secondary nutrition curriculum.

Materials

SPEAC For Nutrition Pre-School Curriculum Unit
SPEAC For Nutrition Secondary Curriculum Unit
Computer terminal availability
Resource handout materials
SPEAC For Nutrition slide/tape presentation
Resource books display
AV materials and equipment for teacher preview.

Learning Experiences

1. Get Acquainted
   a. name tags
   b. Facilitator - Ask participants to introduce themselves by giving their:
      - name
      - school
      - preschool with which their classes will be working
      - an experience your eating behavior.

2. Inservice Overview and Goals
   Facilitator - Give participants a brief overview of what they will be doing during the next two hours.

   1. Small groups of teachers will work on a portion of the curriculum to develop a classroom management plan. The curriculum and the management plan will be shared with other groups.

   2. Everyone will record and code a meal and will have an opportunity to use the computer program, FOINANA.

3. View the SPEAC For Nutrition audio visual presentation.

4. Secondary unit introduction
   Presentation of Curriculum--Facilitator Comment: The curriculum has been written so that the learning experiences can be completed individually or in small groups, although most could be done with the total class. Each unit will be described briefly. Think about your classroom situation and how you would prefer to teach this curriculum: individually, small groups, or total class.
   a. Table of contents - student unit (Handout 1)
   b. Brief description of each section of the curriculum. (Handout 2)

5. Planning for Teaching Nutrition Unit
   Indicate which unit you want to plan. Go to that area for planning a unit. Encourage the groups to each take a different section so that the total group will be familiar with the whole unit after the groups have shared their plans. After the groups have chosen a section, give them the curriculum and planning guide, (Handout 3), ask them to read the introduction and rationale, and their chosen section quickly to get an overview of that section. The planning sheet is to serve as a guide for discussing and recording the organization and management of the classroom activities and resources.

   AV materials, equipment, and resource books referred to in the Secondary SPEAC Unit should be available for preview and review during the planning session.

6. FOINANA
   Facilitator: After introducing the first person to the computer [really two people because one will be watching the first person use it] each should be able to instruct the next person. You will need to be available both to the groups to keep them on task and to those needing help at the computer.

   While the groups are working, have two individuals, at a time, be at the computer. One person should be working on the computer while the other watches and learns what to do. When the person using the computer finishes, he/she finds someone to be the one watching and learning. Try to have only one person from a group at the computer at a time. This will allow a group to continue planning.

7. Sharing Plans
   a. Have a recorder from each group share with the large group what their section was and some ideas for organizing classes to teach that section. (Let groups know how much presentation time they have.)

   b. Briefly (5 minutes) summarize the presentations to point out alternative ways the unit might be taught. This may be done by the groups or the facilitator.

8. Evaluation
   a. Hand each participant an evaluation form to complete and return before leaving. (Handout 7)
   b. Complete the SPEAC For Nutrition Curriculum Evaluation form (Handout 8) after you have implemented a portion of or all of the SPEAC curriculum. This evaluation may be used internally in your center or forwarded to the curriculum project coordinator. The facilitator needs to explain who will use the evaluation results.

Additional Resources

Computer specialist familiar with the FOINANA program and computer programming in your district. This specialist may facilitate the workshop participants at the computer terminals during the workshop and serve as a resource person for the classroom teacher.

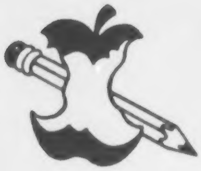
Summary

Facilitator

As educators of secondary and post-secondary students we are responsible for exposing them to life styles and life skills.

Nutrition is an important component of good health for the adult, teenager, and young child. It has been the goal of this workshop to present nutrition information and curriculum to you that may be implemented with the students you teach. By planning one section of this unit you are now better prepared to immediately integrate the SPEAC For Nutrition Program into your existing curriculum.

SPEAC for NUTRITION



RESOURCE MATERIALS FOR THE SECONDARY/POST SECONDARY TEACHER WORKSHOP

90

STUDENT UNIT

Section 1 FOOD ISN'T JUST SOMETHING TO EAT

1. "A Cool Cake"
2. "Jenny is a Good Thing"
3. Food Stations
4. Food Activity

Section 2 WHY DO KIDS EAT WHAT THEY DO?

1. Early Food Experience Memories
2. Exploring Childhood "At Home" in Eating Situations
3. Observation of Family Eating Situation
4. "Why Do Children Eat What They Do?" (filmstrip)
5. Influences on Teen's Food Choices (filmstrip)
6. "Why Do I Eat What I Do?"

Section 3 FOOD FOR ALL SEASONS OF LIFE

1. Food For Growth and Well-Being
2. Food Groups - Where Do They Come From?
3. Analyzing a Pre-schooler's Diet
4. Analyzing Your Own Diet
5. Nutrition For The Life Cycle

Section 4 A CHILD'S EYE VIEW OF FOOD

1. Interview - "Putting Children and Food Together"
2. "Food As Children See It" (filmstrip)
3. Optional Activity - "How Do Servings Measure Up?"
4. Debate Duel - "Food Issues and Kids"
5. Problems to Ponder - Children and Foods

Section 5 PUTTING THE PUZZLE TOGETHER

1. Cardboard food models of snacks
2. Planning Snacks for Children - (reading)
3. You be the Judge - An Evaluation form for judging good snacks for children
4. Putting It All Together - Providing a Snack Experience for Young Children

Handout 2

1. FOOD ISN'T JUST SOMETHING TO EAT

In this section students discover the variety of learning that young children can gain through nutrition activities. A worksheet is provided for students to fill out and compare. After viewing a film the students discuss what children learn from various activities and begin a card file of nutrition activities. The student's next task is to record observations of pre-school children involved in nutrition activity centers, at the pre-school site. Last, they plan, carry out, and evaluate a pre-school nutrition activity.

2. WHY DO CHILDREN EAT WHAT THEY DO?

In Section two the students share experiences that have affected their eating of certain foods. This activity is intended to increase their awareness of the social, cultural, and psychological factors affecting food habits. Then students observe a family with a pre-schooler during mealtime to further understand the formation of eating habits. They compare their observations. Next they interview the pre-schooler and summarize their interviews with other students. The students then view a film that stimulates discussion about their own food habits and the various reasons for those habits.

3. FOOD FOR ALL SEASONS OF LIFE

In this section the students learn about the nutrients that are needed for healthy growth and development and their relation to the four food groups. They record their own food intake and assess it by using the FOINANA Computer Progam. The students discuss nutrients a young child needs to grow and develop and the importance of developing positive attitudes toward food and mealtime at an early age. The students divide nutrient comparison cards into four food groups. They use the comparison cards to determine nutrients for one meal. Then they analyze a pre-schoolers diet using the FOINANA program. Next they complete worksheets. Last, they compare the nutritional needs of teenagers and pre-schoolers.

4. A CHILD'S EYEVIEW OF FOOD

In section four the students discover the affect of appeal, safety and palatability of food for young children. The students interview pre-schoolers to determine both the characteristics of children and the characteristics of food that affect whether a child will eat a food or not. During discussion students share the results of their interviews to discover the affect of attitudes and values on food preferences. After viewing a filmstrip, the students review menus for appeal and learn the importance of portion sizes. The students then participate in debates on the pros and cons of cleaning plates, sweets, eating together, and other nutrition topics. The students are then given some dilemas to solve with the knowledge they have gained from this unit.

5. PUTTING THE PUZZLE TOGETHER

In this last section the students learn about snacks and their role in a child's and teen's nutritional and educational life. They plan snacks using cardboard food models and as a group, plan five snacks using a snack checklist. The students judge snack menus and improve those that do not meet the standards. They consider snacks available in vending machines and list nutritious snack food and drinks that could be placed in vending machines.

In the last activity of this section, the students design a form for judging snacks, then plan, carry out and evaluate a pre-school snack experience.

Handout 3

PLANNING GUIDE

Quickly read through the section of curriculum your group chose to use for planning.

As a group use the Planning Guide to help you make decisions about the organization and management of your class when teaching the nutrition curriculum. The Planning Guide is provided to help direct discussion and to record your plans. If there are additional considerations in your group, record them. If a question does not apply to your situation, change it or go to the next one.

1. How will you teach your class, individually, small groups, total class or a combination of these?
2. How will you introduce the unit?
3. What are your expectations for the students:
   a. participating in class?
   b. completing assignments?
   c. sharing results of interviews, observations, etc.?
   d. using resources?
   e. scheduling to work in pre-school site? computer site?
   f. working in pre-school site?
   g. arriving and departing from pre-school site? computer site?

4. How will these expectations be communicated to students?

5. What are the consequences for student failure to meet these expectations? How and when will that be communicated to the students?

6. If the class is being taught as a single group:

   a. How will you assure maximum participation?

   b. How will students share with each other?

   c. How will lessons be taught to accommodate groups of students leaving and returning from pre-school site? Leaving and returning from computer site?

7. If the class is working in small groups, how will students gain skills in working in cooperative groups which require little teacher intervention in order to complete tasks well and on time?

CURRICULUM

1. Which lessons in this section will you use?

2. How will you adapt these lessons to your particular classroom situation and the ability levels of your students?

3. How will you accommodate the non-reader? The physically handicapped?

4. Describe how you will schedule these lessons into the time period students have available each day.

5. What will be the procedure for students working each class period? What are the consequences if not followed?

6. What are your tasks each class period? Are there administrative tasks that the students could be doing? Which ones? How?

7. How and when do students get feedback on how they are doing?

PRE-SCHOOL SITE

1. How will students be scheduled into the pre-school site? What will be the procedure for the students?

2. Who will explain to the students what will be the expectations for them in the pre-school site? How will this be done? What are the consequences for not meeting the expectations?

3. Who is in charge when they are in the pre-school setting? How will students know this?

4. Who will be evaluating the students' participation at the site? How and when will students get this feedback?

5. How will you receive feedback on students who have been in the pre-school setting?

6. What is the procedure for reporting to the pre-school site? Leaving the site?

COMPUTER

1. What is the procedure for scheduling for the computer? What are expectations when going and returning from the computer? How many students can be at the computer site at one time?

SPEAC FOR NUTRITION
Workshop Evaluation Form

Date: ______________________

Location: ______________________

____

Grant conditions of SPEAC For Nutrition require a critique from participants for purposes of accountability as well as for planning future programs. You are requested to complete this form for this workshop and return it to the registration table. Thank You!

Please rate the following questions by placing the numbers in the appropriate boxes to the right.

1=To a great extent, 2=To some extent, 3=To a slight extent, 4=To no extent

1 2 3 4

1. To what extent was the session of value to you? ______________
2. To what extent did this session provide nutrition information on the pre-school child? ______________
3. To what extent do you expect this session to assist you in planning and serving appropriate well-balanced, nutritious and appealing meals and snacks to the pre-school child? ______________
4. To what extent did this session provide familiarity with specific of nutrition education activities with the pre-school child? ______________
5. To what extent did this session provide you with information on the SPEAC For Nutrition program and teaching materials? ______________
6. To what extent do you expect this session will assist you in promoting a cooperative staff-parent nutrition education program in your center? ______________
7. To what extent do you feel the format of this session could have been improved? ______________

8. What additional assistance do you need at this time?

9. What techniques and methods presented in this session will you use with your staff, parents, and students?

Handout 5

SPEAC FOR NUTRITION
Curriculum Evaluation

Test model :
Dates tested :
Name of Center :
Name of Instructor :
Number of Participants:
Age range of Learners :

I. General Questions:

A. I used this unit with:

	YES	NO
Preschool teachers	___	___
Parents	___	___
Pre-school child	___	___
Food Service Personnel	___	___
Teacher education	___	___
Secondary/Post Secondary student	___	___

B. Contents are designed primarily for:

Classroom use	___	___
Inservice	___	___
Parent Information	___	___
Support	___	___

Other (explain) ____

____

II. Material Design and Layout:

A. Is the material:

Clear and well organized	___	___
Appropriate for age level?	___	___
Current	___	___
Stereotyped or discriminatory?	___	___
Valid?	___	___

Please explain any above responses:

	YES	NO
B. Are the goals and objectives of the material stated clearly?	____	____

C. Do the materials incorporate various kinds of values into the content or lessons:

	Socio-Economic	Cultural
Frequently	____	____
Occasionally	____	____
Rarely	____	____
Never	____	____

D. Do the materials show evidence of:	YES	NO
different ethnic groups relating to each other?	____	____
diversity of life styles within an ethnic group?	____	____
accurately reflected life styles and contributions of individuals?	____	____
E. Do the materials have sufficient information to make the materials useful and relevant?	____	____
F. Are the physical characteristics of the material:		
appealing to the eye	____	____
durable	____	____
appropriately presented	____	____
printed clearly	____	____
adequately spaced for easy reference	____	____
pages arranged for easy reference	____	____

Comments:

III. Student Suitability:

A. Is the learning level appropriate	____	____
B. Is it motivating?	____	____
C. Can the student relate to the materials?	____	____
D. Does the material promote sound thinking and good judgment?	____	____
E. Will it make learning easier and more interesting?	____	____
F. Will the material objective be achieved?	____	____
G. Does it broaden the student's experience?	____	____

IV. Educator Suitability:

A. Do you feel you have adequate knowledge and skills to use this unit effectively? YES ____ NO ____

B. Are you motivated to use this unit? ____ ____

V. Facilities:

A. Do you have the necessary equipment and resources to use this unit? ____ ____

B. Were the resources provided for use during field testing helpful? ____ ____

VI. Overall Evaluation:

A. In general, is the content accurate in these materials? ____ ____

B. In general, how innovative are those materials? ____ ____

Please comment:

C. In general, would you recommend these materials to be used by groups similar to yours? ____ ____

Comments:

VII. Evaluation:

The evaluation tools used in the unit were appropriate to the learner. ____ ____

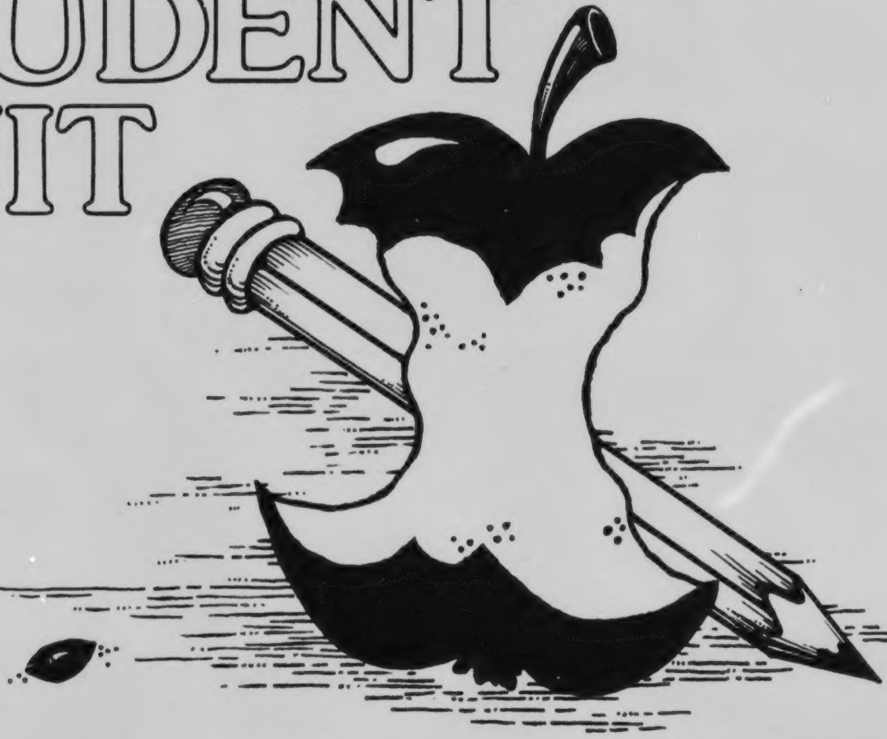
Comments:

General Comments and Recommendations

Please share any additional recommendations with us so our final curriculum units will be the result of your testing and input.

Students
Parents
Educators
Administrators
Children
for **NUTRITION**

High School / Post High
STUDENT UNIT



a cooperative adventure in preschool nutrition education

Minneapolis Board of Education
Marilyn A. Borea, Chairperson
Joy M. Davis W. Harry Davis Judith L. Farmer
Philip A. Olson James W. Pommerenke Jane A. Starr

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Reviewed by:

SPEAC For Nutrition Advisory Board

Consultants:

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Karen West, Editor
Chris Wold, Artist

Typists: Nancy Sti
Mary Louise Gay

Rationale

Teachers have often truthfully remarked, "I learned more than the kids did!" The process of instructing others necessitates:

1. A thorough understanding of the concepts to be taught.
2. An ability to relate concepts to one another in a concise way.
3. The skill of applying the concepts to meaningful, familiar experiences of one's students.
4. That the teacher must often teach him/herself before learners may learn.

This process of learning in order to teach was utilized in the curriculum which follows. The learning experiences are designed to give teens a background in nutrition principles so that they may apply these principles to the activities they plan and implement with young children. Whereas teens have often found nutrition education to be "boring" and "distasteful", its relevancy becomes clearer when they are teaching pre-school children. It is believed by this program that by learning nutrition principles and teaching them to the pre-school child teens will apply these principles to their own lives.

U.S.D.A. and H.E.W. Healthy Eating Guidelines for

1. Eat a variety of foods.
2. Maintain ideal weight.
3. Avoid too much fat, saturated fat and cholesterol.
4. Eat foods with adequate starch and fiber.
5. Avoid too much sugar.
6. Avoid too much sodium.

Goals

1. To develop an awareness by teens of their own nutritional needs and the needs for the pre-school child.
2. To examine the developmental, cultural, social and ethnic meanings of food in their life and in the pre-school child's life.
3. The teens will examine their own eating habits and consciously choose good eating habits.

Application

The student unit is designed to compliment nutrition and early childhood study programs on a secondary and post secondary level. The methods by which teens are to accomplish the unit goals are many and varied. They will require use of a computer program to analyze their own and a child's food intake for nutritional adequacy. They will observe, interview, debate, and synthesize solutions to problems a lab school or child care site is required for many of the lessons. Whenever possible, they will gather information from first hand sources and will apply it to real situations. In this process, the teens will interact with pre-schoolers, parents, professionals in the day care field, and professionals in the nutrition field. They will have an opportunity to sample a variety of different view points and become aware of many of the dilemas which exist concerning children and food.

Lesson Format

It is suggested that this unit begin with a shared eating experience by the teens and the teacher in their classroom. This experience would provide the basis for a discussion of the feelings associated with and the uses of food in our culture. The differences in the atmosphere between a regular class period and the eating experience could be drawn upon several different times as the unit progresses. The initial two learning experiences in Unit #1 are designed to be done with the total class; the subsequent experiences are planned so that they may be completed individually or in small groups. Most may also be done by a total class. With this design, it was thought that the classroom teacher would have the flexibility necessary to accommodate:

1. Different students gone from class each day as they work at field sites or the laboratory school.

2. Individual students using the computer terminal. The five units and the activities within the units are sequenced in an order designed to promote the overall view of nutrition and food as being a complex, total experience. In addition, some activities rely upon the mastery of concepts and skills presented in previous learning experiences. However, it is thought that, once a teacher becomes familiar with the total curriculum, it would be possible for him/her to reorder the experiences or units, dovetail them, or select particular units or activities to adapt to particular classroom needs.

An overall teacher's guide has been prepared for each unit. Included in this guide are the goals, student outcomes, materials needed, content and learning activities as well as an introductory statement which describes the context of the lesson. Following the teacher's guide are direction sheets for each learning activitiy which are written for students' use in enough detail so that they may be used without constant teacher direction. Within or after the student's activity sheet are the discussion questions, work sheets, interview forms and other support materials that are necessary to complete the activity. Periodically, suggestions and/or materials for additional or alternative activities are given and may be used at the discretion of the teacher.

STUDENT UNIT CURRICULUM

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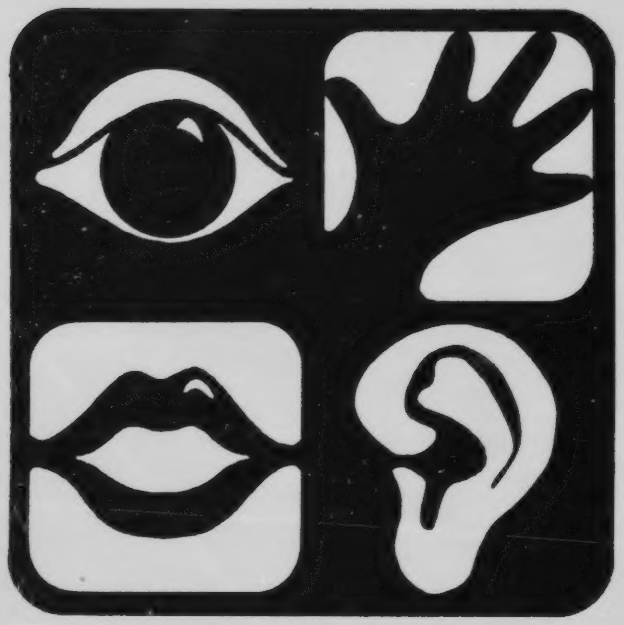
UNIT I

FOOD ISN'T JUST SOMETHING TO EAT



For young children and teens, the food experience does far more than provide nourishment for their physical bodies. Because young children enter into all experiences with their whole being, food may become a vehicle for providing motor, sensory, intellectual, emotional and social experiences and learnings. Through thoughtful planning and implementation, students and teachers may make food activities into valuable learning experiences for many developmental areas in young children.

FOOD ISN'T JUST SOMETHING TO EAT

Goals

1. Awareness of how motor, sensory, emotional, and intellectual development of a child may be fostered through experiences with food.
2. Ability to plan and carry through a food activity that is designed to foster at one or more areas of a child's development.

Intended Learner Outcomes

1. The student will be able to identify how development is being fostered or not fostered in a given food activity.
2. The student will be able to select and plan a pre-school food activity that is appropriate for fostering a child's development.
3. The student will be able to document and evaluate food activities for young children including the goals intended and the plan for implementation.
4. The student will be able to conduct food activities with the pre-school child.

Materials

Four Activity Sheets with support materials
Story - "A Cool Cake"
Film - Jenny is a Good Thing"
Stations - see activity sheet for suggestions
4 x 6" Note Cards
Food Activities Curriculum References - See activity sheet for suggestions

Content

A thoughtfully planned and executed food activity may encourage development in young children in one or more of the following ways:

1. Increased feelings of self-esteem. This gives a feeling of competence and self-worth.
2. Practice of good health and safety skills.
3. Practice in cause and effect thinking and problem solving skills.
4. Stimulation of sensory responsivity.
5. Practice in fine motor skills.

6. Refinement and exploration of social skills.

7. Stimulation of creative thought and action.

8. Utilization and enrichment of language skills, especially vocabulary building skills.

9. Exposure to adult role models and opportunity to rehearse life skills.

Learning Experiences Lessons

A Cool Cake

1. Students read "A Cool Cake" individually or in small groups. Discuss the questions. Compile list of ways food may be used to provide experiences that foster development in children.

Jenny is a Good Thing

2. Using list compiled in previous activities, students view film, "Jenny is a Good Thing." On the lesson sheet instructions are given prior to film to take notes on innovative and worthwhile activities for acquainting children with food activities. Suggestions for questions for classroom discussion are included on film activity sheet.

Food Stations

3. Students participate in a day in the lab school in which stations featuring food activities have been set up for the children. A special event in a day care facility may be a featured food activity fiar. Teens are given opportunities to observe and interact with children at several stations. Follow-up activities include adding activities to their card file and critiquing at least two of the activities. Refer to the SPEAC Pre-School Curriculum for activities.

Children's Food Activity

4. Teens select, plan, and implement a food activity for one or more children in the lab school. Following the activity, students evaluate its plan and execution for intended outcomes.

Additional Resources

Hutchins, Bobbie Child Nutrition and Health, McGraw-Hill Book Company. New York. 1979. 234 pp.

SPEAC For Nutrition Pre-School Unit.

Children Can Cook, filmstrip with record

Bark Street Films
267 W. 25th St.
New York, N.Y. 10001 $14.00

Shows children's involvement with food and nutrition activities as a natural development process with skilled teacher's direction.

A COOL CAKE

ACTIVITY SHEET

Read the story and answer these questions by yourself or in a small group:

1. Make a list of all the skills Phillip learned or practiced by making this cake. Besides the doing things, remember to include thinking and feelings. Next, tell specifically what happened in the story that helped Phillip do these things.

Skills (doing, thinking, feelings)	What Helped Phillip Learn Examples:
(Feeling) Men and boys can cook and have fun doing it.	Dad liked to cook and invited Phillip to help him.
(Thinking/Knowing) Cleanliness is is important in the preparation of food.	Dad had Phillip wash before he started cooking.

Compare your list with 2-3 other people. Do you agree with what they listed? Add things to your list that you didn't think of.

2. What did Dad do to make baking a cake a good learning experience for Phillip? (You should be able to come up with at least three different things.)

3. Briefly describe what you think happened when it was time to serve the cake to Grandma and Grandpa that evening. Tell why you think this would be the "right" ending to this story.

4. Pretend that the manager of your nursery school/day care center came to you and said that he/she was considering cutting out all cooking activities because they were too expensive. What would you say?

"A COOL CAKE"

"Phillip! I'm making a cake. Do you want to come and help?" Dad shouted out the back door to four-year-old Phillip who was digging a hole near the fence.

"Sure. What kind it it going to be?" Phillip called as he ran toward the house dropping his shovel in the sandbox as he passed.

Dad held the door open for Phillilp and touseled his hair as he passed. "Holstein, of course! Our favorite kind. We'll have it for dinner tonight when Grandma and Grandapa come over."

Dad guided Phillip toward the bathroom and pulled the stool up to the sink. "Let's see how clean you can get yourself and I'll go set out the supplies."

Dad dug through the drawers and cupboards for the non-breakable bowls and utensils. He got out the cake mix and read over the instructions before Phillip came bursting into the kitchen face and hands polished and dripping.

"Great job! We're ready to work." Dad caught Phillip's face and hands with a nearby towel and pulled a sturdy chair up to the table for Phillip to kneel on.

"First, open this box and pour the mix into this bowl." Dad handed the box to Phillip and started the cardboard opening strip for him. Phillip fumbled at the box and then got a hold of the opening and pulled it off. He tore at the paper lining and then held the opened box over the bowl, watching the floury mixture fall into the bowl and onto the table.

"What makes the stuff go down instead of up, Dad?" Phillip asked as he took a pinch of the mix and popped it into his mouth.

"Something we call gravity pulls everything toward the ground. That's why you don't go floating around in the air." Dad said as he brushed the mix that had fallen on the table back into the bowl. "Let's see now if you can count these eggs as I break them into the cake mix."

Phillip watched intentedly as his dad added the eggs. "One. . . two," he counted slowly.

"Why aren't there baby chickens in these eggs?" Phillip peered into the bowl, his nose touching the rim.

"Because the roosters, didn't give the mother chickens any sperm to start the chicks growing in the eggs. Farmers keep the roosters and hens apart if they want to sell the eggs."

"Now let's see if you can fill this cup with water right up to this line." Dad handed Phillip a small plastic pitcher of water and pushed the measuring cup in front of him pointing to a line.

Phillip poured slowly squinting hard at the line and watching the water come closer to the level at which Dad was pointing. "There!" he exclaimed with an immense sigh.

"Great!" Dad said "You've got a real steady hand. You could be a pharmacist some day. Now let's mix all this stuff together. I bet you can hold the mixer this time while I hold the bowl and scrape the sides."

Dad and Phillip finished the mixing and then each greased a round cake pan while talking about how this was just like skating across the ice in winter. Dad poured the batter into the cake pans while Phillip scraped the sides of the bowl.

"Dad. This stuff tastes kinda the same but kinda different from when it was dry. How come?"

Dad looked up. "I bet you can think of some reasons it might taste different but still the same."

"Well, I guess we put some other things in it, huh?"

"That's probably one reason it tastes a little different. Can you remember what we put in it?"

Phillip pondered a minute and then his eyes lit on the broken egg shells. "Oh, yeh. We put in eggs and we put in water. But I have water in my mouth so probably it's the eggs that make it taste different."

"You're a good thinker, Phillip. Well, let's get this cake in the oven or we're going to have a cold runny cake for supper."

Phillip's eyes sparkled. "O.K. Dad. But even after we bake it, it's going to be a pretty cool cake, huh?"

JENNY IS A GOOD THING

SPEAC for NUTRITION

10-20 students
45 minutes

ACTIVITY SHEET

Before Viewing Film:

Look over the list of skills that you started to make in the "Cool Cake" activity. Be looking for other learning experiences that children may have with foods as you watch the film "Jenny is a Good Thing."

You will be putting together a card file of food activities you can do with young children. As you watch the film, you may see an activity that seems unusual and worth putting in your file. Use the form below to organize your activities (or make up a form that suites you better).

____
Name of Activity

Age of child _______
No. of child. _______
Time required _______

Learning to take place _______________

Materials needed _______________

____

Directions _______________

____

Notes _______________

____

After viewing film:

Discuss these questions in small or large groups.

1. What activities from the film were particularly interesting to you? Would you be interested in trying them with children in the lab school? What changes would you have to make?

2. The film shows activities involving food and nutrition in many parts of the curriculum. What did you see and observe that you believe gives the children a "head start"? What do you think children gain from:

   - setting the table
   - preparing food
   - serving food
   - on field trips to farm and market
   - examining and eating peas out of the pod
   - experimentation and new experiences - the melon

3. What were some of the things you saw the children doing that would help them learn and feel good about themselves? What arrangements were made by adults to make these "success experiences" for the children?

4. What different cultural backgrounds were seen in the film? How could these differences in children be taken into account in a food and nutrition program?

Lesson 3

FOOD STATIONS

20 students
2 hours

ACTIVITY SHEET

Directions:

There will be several food activities designed and set up by the teacher and teens for the children in the child lab. You will have a chance to work with the children at three or four of these centers. Keep in mind the list of food learning experiences that we have been making and try to provide these for the children. After being with the children, you will be doing two assignments:

1. Write up some of the activities on your note cards that were started with the Jenny film.

2. Evaluate two of the food activities with the check sheet provided or with a list you put together with teacher help.

Suggested Stations:

1. Smelling, tasting table
2. Corn meal sand plan
3. Vegetable printing
4,5 Two cooking activities that require different skills and include picture recipe cards.
6. Food stoves and finger plays
7. Grocery store and kitchen in doll corner

Optional or Additional Activities:

Follow one child as he/she participates in several of the food activities. Note how he/she reacts differently to different experiences. What seems to be his/her likes, dislikes? Why do you think he/she reacts as he/she does?

ACTIVITY SHEET

Learning Experiences*	Activity #1		Activity #2		Notes, comments, Observations
	Yes	No	Yes	No	
1. Made child feel capable and skilled					
2. Taught health/ safety rules					
3. Encourage thinking and problem solving					
4. Stimulated child's senses					
5. Used motor skills					
6. Encouraged social interaction					
7. Promoted creativity					
8. Encouraged language use and new words					
9. Gave child opportunity to see and try out different roles					

* It is not expected that each activity will contain all these learning experiences for children. However, a skillful child care worker is able to enrich activities with many experiences for children even though the activity was not planned especially for these purposes.

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FOOD ACTIVITY PLANNING FORM

Name of Activity

Kinds of experiences child should get from activity

Materials you will need

Room arrangements/prior preparation

What can children do themselves?

With what will they need help?

Special safety/health precautions

Outline of what will be done

FOOD ACTIVITY

1-3 students
1-2 hours

PLANNING AND EVALUATION SHEET

Now it is your turn to plan and carry out a food activity with young children. Remember the ways that have been discussed to make these activities and learning experiences for children. Consider healthful foods when selecting cooking activities. There will be several resources from which to get ideas. Complete the planning sheet and give it to your teacher when you have decided what you want to do. Reserve a day for doing the activity with the children in the lab.

Following is a list of resources which may help you select and plan a foods activity for children.

Ferreira, Nancy J., The Mother-Child Cookbook

Goodrum, Mary T. and Gerry Pollen, Creative Food Activities for the Young Child
Center for Science in the Public Interest. 1755 S. Fourth St. N.W., Washington, D.C. 20009

Davis, Barbara, Learning Science Through Cooking

Cobb, Vicki, Science Experiments You Can Eat

After you have completed the activity, fill out the evaluation form. Find a partner who will observe the activity and who will help you when necessary. After you have listed the three most important things a foods activity like yours should have accomplished, give your partner a second evaluation form and ask him/her to complete it for your activity. Discuss your two evaluations after they are completed.

UNIT II

WHY DO KIDS EAT WHAT THEY DO?

Why do children eat what they do? There are many factors which influence food choices. Often, those influences are not consciously thought about. This unit is designed to help students think about what determines food habits, so that they are able when necessary, to make conscious food choices rather than maintaining an undesirable habit.

WHY DO CHILDREN EAT WHAT THEY DO?

Goals

Understanding of some social, cultural, and psychological factors which influence food habits of teens and young children.

Intended Learner Outcomes

1. The student will be able to identify some social, cultural, and psychological factors affecting their own food habits.
2. The student will be able to recognize some social, cultural, and psychological factors influencing young children in an eating situation.

Materials

Drawing and/or writing materials
Exploring childhood "At Home" films:

Rachel at Home
Rachel Revisited
Craig at Home
Howie at Home
Jeffrey at Home

Family Observation Form

Guidance Associates Filmstrips:

"Nutrition: Facts, Foods, Frauds, Facts"

Why Do Children Eat What They Do? Interview form.

Why Do I Eat What I Do? Worksheet

Content

Food choices of children are influenced by the child's feelings, perceptions, the foods made available, the atmosphere, and the people around him/her in an eating situation--especially family members.

Certain foods may be associated with either good or bad experience, with the result that the food may or may not be accepted again. Early childhood experiences may affect our food choices later in life.

Food habits are acts related to eating that we do over and over until we no longer think about them. Food habits or unreflective choices are influenced by many social, psychological, and cultural factors.

Some Factors are:

Availability and cost of food
Sensory factors of taste and smell, hunger and appetite
Social and cultural factors such as religious, ethnic, racial, socioeconomic, region of the country, social problems, and values.

Food habits determine what is eaten and therefore what nutrients are available to the body for good health. We can learn about the influences on our food choices and about what nutrients our bodies need for good health. This can help us make our food choices deliberate ones rather than always following habit.

Learning Experiences Lessons

Early Food Experience Memories

1. Students make a drawing or write a paragraph of an early food experience memory. Students who wish could share their remembrance with others. Discuss how that experience has affected their eating of those foods now.

Exploring Childhood "At Home"

2. Students discuss the Family Observation Form. Then view two or more of the Exploring Childhood At Home films and fill out the observation form for each one. Compare observations with other students in a small group and discuss. (Exploring Childhood films, Observation Forms and Discussion Questions.)

Family Observation Form

3. Students observe a family eating situation using the Family Observation Form. This situation could be in a home or restaurant, etc. Students, again, share their observations in a small group. The teacher may find it helpful to process this with the whole class.

Why do Children Eat What They Do?

4. Students interview pre-schoolers to find out how they view their eating situations using the "Why Do Children Eat What They Do? Interview Form". If possible, students should interview the preschooler they observed in the family eating situation. Students summarize what they learned from the pre-schooler by writing a paragraph, then discussing in small group.

Influence on Teen's Food Choices

5. Students view Part One and Part Two of the Guidance Associates filmstrip which look at the adult perspective on influences on food choices. Discuss the discussion questions in small group.

"Why Do I Eat What I Do?"

6. Students complete the "Why Do I Eat What I Do? Worksheet", with one other person.

Additional Resources

How Children Learn About Food

Visual Communication Office
412 Roberts Hall
Cornell University
Ithaca, N.Y. 14850

Lesson 1

EARLY FOOD EXPERIENCE MEMORIES

Goal: Each member of the group will draw or write about an early food experience memory and then share with the others.

1. Try to recall a childhood experience that profoundly influenced your eating habits. Draw a picture or write a paragraph about this memory.

2. Share this remembrance with others in your group.

3. Discuss how that experience has affected your eating of that food now.

4. Share with the teacher your group's progress.

Lesson 2

EXPLORING CHILDHOOD "AT HOME" EATING SITUATIONS

Goal: Each member of the group will observe family eating situations and be able to recognize some factors influencing the child and share their observations with others in the group.

1. Look at the Family Observation Form and become familiar with the questions concerning things to look for. Ask for clarification for any you do not understand.

2. Set up the film projector to view one of the Exploring Childhood At Home films:

   Rachel At Home
   Rachel Revisited
   Craig At Home
   Howie At Home
   Jeffrey At Home

   View this film and fill out the observation form. Follow the directions at the bottom of the page for discussion.

3. View another film, using-the same process.

4. If time, view additional films.

OBSERVATION OF FAMILY EATING SITUATION

1. Each student find a family in an eating situation that you can observe. Again, use the Family Observation Form. (This situation might be at a restaurant, in a home, at a church or community center, etc..)

2. Share your observations with others in your small group.

3. Use the Family Observation Form Discussion Questions to help you look for patterns of influences on the child's eating behavior.

4. Discuss your findings in small group (or whole class) together with your teacher.

OBSERVATION OF FAMILY EATING SITUATIONS

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Questions	Notes
Where does this eating situation take place?	
Who is present at this eating situation?	
Describe the atmosphere (relaxed, busy, etc.).	
How did the child seem to be feeling? (tired, restless, excited, etc.).	
What foods were being eaten?	
Did everyone eat the same foods? Were the serving sizes the same?	
What models of eating behavior were other family members giving the child? (eating food expecting child to eat, complain about food, accepting of food).	
Did the child have any choice in what he/she ate?	
Was there any rewarding or scolding for eating behavior? For what behavior? Who did it?	
Was the child encouraged to "clean his/her plate?"	

Compare and discuss vour observations with two or three others. Did you note similar or different things? Did you note additional things of importance that were not on the above chart? Revise this chart if needed.

FAMILY OBSERVATION FORM DISCUSSION QUESTIONS

In the observations you made, who seems to have control of the foods made available to the children?

What things are similar in your observations when there was rewarding for eating behavior?

What things are similar in your observations when there was scolding for eating behavior?

Lesson 4

"WHY DO CHILDREN EAT WHAT THEY DO?"

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Goal: Each member of the group will interview a child using the interview form and then share with the group.

1. Look at the "Why Do Children Eat What They Do? Interview form. Become familiar with the questions.
2. Each student find a pre-schooler to interview. (It would be desirable if you could interview the pre-schooler whom you observed before, but it is not necessary.)
3. Interview the pre-schooler using the form.
4. Use the attached "Questions to Think About" in summarizing your interview with the child.
5. Share your findings with others in your group. Are your findings similar or different from the observations?

WHY DO CHILDREN EAT WHAT THEY DO?
INTERVIEW FORM

1. What are the different foods a person in a family like yours eats almost every day? Why?

Foods	Why

2. Both Jim and Bob stayed at friends' houses over the weekend. Monday morning they were talking about it on the way to school.

Bob said: "I had a great time because the food was just swell; each meal was wonderful!"

Jim said: "Oh, I had awful meals; the food was terrible. It was no fun at all!"

Ask the children to suggest what foods they think were served.

Name the food served at the house Bob visited	Name the foods served at the house Jim visited
Breakfast	
Lunch	
Dinner	

3. Name a food which someone in a family like yours would eat and would be praised for eating?.

Food	Who would praise them?	Why would they praise?

4. Name a food which someone in a family like yours would eat and would be scolded for eating?

Food	Who would scold them?	Why would they scold?

QUESTIONS TO THINK ABOUT IN SUMMARIZING
INTERVIEW WITH CHILD

The answers to Question #1 on interview form should indicate the foods which form the basic part of the diet and which arouse no conflict in the home or the community. Do these foods represent a particular ethnic group? Based on what you know now, do these foods provide a balanced diet?

The answers to Question #2 tell what foods are held as special and well liked and also foods which are disliked. Which of these foods do you think would be easiest to help children like and accept? Which of the well liked foods do children need to learn to eat in limited amounts because they are nutritionally empty calories.

Answers to Questions #3 and #4 indicate the attitudes and reasons why certain foods are liked or disliked, or at least the reasons given by their parents or other caregivers. These questions also indicate the person with the most authority for that child in regard to food. Who is that person(s)? What foods are they praised for? What foods are they scolded for?

Share what you found from your interview with two or three other students. Then, write a paragraph on what you learned about children and food that will help you in planning food experiences with children.

INFLUENCES ON TEEN'S FOOD CHOICES

Goal: Each member of the group will identify some social, cultural, and psychological factors affecting his/her own food habits, and discuss them.

1. Set up the filmstrip projector with the Guidance Associates filmstrip, "Nutrition: Foods, Fads, Frauds, Facts." If possible, view both Part One and Part Two. If not enough time to do both, do Part Two.
2. After viewing each part, use the discussion questions as a guide for discussing in your small group.

NUTRITION: FOODS, FADS, FRAUDS, FACTS
TEACHING AND DISCUSSION MATERIAL
Guidance Associates Filmstrips

Discussion Questions From Filmstrip Script

Part One: Food Choices: More Than a Matter of Survival

1. Harry and Sylvia raise several points about the difficulties of food shopping faced by today's consumer-rising food costs, changing information about food and nutrition, and the threat of a food shortage. Have you read about some of these problems? Explain. Have any of these things affected you and your family? If so, how? If not, why not?

2. Tom seems to think that a "food pill" might solve some problems. Is such a thing possible? Would it solve any problems? Would it create problems? Would it be accepted? Explain your answers.

3. Harry and Sylvia mention some cultural and traditional occasions at which food plays a part. How do you think these traditional associations arose? Can you think of examples other than those given in the filmstrip?

4. Certain foods have significance in religious rituals. Give examples and discuss.

5. Harry and Sylvia observe that food and mealtimes can be symbolic of feelings or ideas such as family unity, friendship, hospitality, status, and wealth. Give examples of foods and situations that illustrate these. How do you think these meanings came to be?

6. Harry mentions that there are fashions in body type as well as in clothing. Why do you think full figures are no longer fashionable?

7. What of concern to Americans in particular?

8. How much does advertising influence your choice of what to eat?

9. Mandy seems to think that "natural" foods are the answer. What do you know about "natural" foods and about additives in the foods you eat?

10. What myths about particular foods do you know of?

11. Try to recall some of the expressions involving food that were stated or paraphrased by characters in the filmstrip: "man does not live by bread alone." "that's not my cup of tea." one man's meat is another man's poison." "meals fit for a king." have their cake and eat it, too." What do these expressions mean literally? Figuratively? What are some other phrases or sayings that refer to food?

Part Two: Food Habits: More Than Meets the Eye

1. What does the title, "Food Habits: More Than Meets the Eye" imply?

2. What might be some implications of the recent research on the hunger-control system? Its relationship to weight control?

3. How do the five senses stimulate or inhibit the appetite? Can you think of examples other than those illustrated in the program? Have your senses ever made you feel "hungry" even when your hunger-control mechanism has not signaled you to eat? Explain.

4. How are eating habits and food preferences learned? Can you recall some childhood experiences that profoundly influenced your eating habits? Your likes and dislikes? If so, describe them.

5. Think of one food that you really detest and try to analyze why you don't like it. Is it its taste, smell, texture, the way it looks, the way it makes you feel? Do the same for a food that you like very much.

6. What foods do you eat because they are good for you? Because your parents insist? When in the company of your friends? What foods are a special treat?

7. Do your eating patterns change when your mood changes? When you are anxious or depressed? In what ways?

8. What have you heard or read recently about diets, health, and nutrition? Why are some of the popular fad diets undesirable?

9. How can keeping a food inventory help you to change your eating habits?

Part Three: Food Groups: Four To Go

1. What would happen if you ate only one food (suppose you had nothing to eat or drink but milk, for example)?

2. In what ways is your body like a machine? In what ways is your body not like a machine?

3. Explain what these terms refer to and what they do in the body: nutrient, vitamin, mineral, protein, fat, carbohydrate, and cholesterol.

4. Why is variety important for good nutrition?

5. What are the four basic food groups? What nutrients does each supply? Use specific examples in your answer.

6. In what ways is your diet monotonous or unvaried at present? In what ways can you vary your diet?

7. Is there any nutritional value to foods such as cola, candy bars, cake, and cookies? Is there anything harmful? Explain.

8. Some of the science of nutrition is controversial. What have you heard about eating eggs? About whole milk? About beef? About massive doses of vitamins?

Structure and Summary of the Program

Part One: Food Choices: More Than A Matter of Survival

This part of the sound filmstrip program deals with the cultural and social significance of food and eating patterns. It discusses the ways in which customs, food choices, advertising, and changing and often contradictory information about food can affect one's eating habits and thus one's approach to nutrition.

Some common food and nutrition ideas and practices are revealed through a conversation among four people who meet in a supermarket. Each person has a different attitude toward food, nutrition, and health.

Tom is a tall, thin, young man who attaches little significance to food. While aware of the importance of nutrition, he prefers to rely on convenience foods because he and his wife are busy, hardworking people who have no time to prepare and eat elaborate meals.

Sylvia is a serious woman who is informed and concerned about nutrition and food. She wants her family to eat well but knows that the high cost of food, coupled with the often controversial and conflicting information about nutrition, makes it difficult to shop and eat wisely.

Harry is a middle-aged man, somewhat overweight, who is aware of the importance of food customs and meal sharing to human needs. But he is a victim of the many influences that tempt the contemporary consumer to eat too much of everything and too many of the wrong things.

Mandy is a young woman who advocates eating only food without additives and preservatives but seems unaware of some of the fads and frauds that are associated with health foods.

The program opens as Tom, Sylvia, and Harry begin a conversation about the difficulties of shopping wisely and economically. Tom's suggestion that a "food pill" would solve their food problems provokes a discussion about the part food plays in observance of holidays and special occasions. Sylvia and Harry also point out that meals are shared experiences that are often symbolic of family togetherness, warmth, friendship, and hospitality. They also discuss the cultural and traditional significance of food.

Tom observes that contemporary customs and rituals may be part of the cause of some health problems such as overweight. Sylvia points out that overweight and lifestyle are interrelated, and adds that "hidden hunger," which results from eating food that fills one up but does not provide proper nourishment is another problem resulting from contemporary eating habits.

Harry immediately responds to an announcement in the supermarket about a sale on cola. This leads the group to discuss tha influence of advertising on consumers. They also discuss the importance of reading labels for nutritional information.

Mandy joins the conversation and turns it to a consideration of health foods and chemical additives in foods. Sylvia cautions that it is unwise to believe any apparently extreme position on food and health she observes that on the one hand, some chemicals and additives have been found to be dangerous, and that on the other, many health food claims are exaggerated or false. Mandy concedes, but asserts that the American diet often consists of too much meat and not enough fresh vegetables and fruits. Part one concludes as Sylvia reflects that they all should learn more about nutrition, health, and eating habits.

Part Two: Food Habits: More Than Meets the Eye

Part two explains and illustrates the ways in which eating satisfies not only physiological needs but also psychological needs. It also discusses some of the consequences of poor eating habits and suggests ways to begin to improve bad eating habits. The concepts are presented by two narrators, a man and a woman, situated in a set designed to resemble a restaurant. A screen behind them illustrates the points they are making.

The narrators comment that the primary reason people eat, of course, is because humans need food to survive. They then discuss and illustrate some of the recent scientific findings about the body's hunger-control mechanism--how the mechanism signals hunger and satiety, how it helps people to meet their bodies' nutritional needs, and how it helps to keep weight at a stable level. Findings from research about the relationship between body weight and fat cells are explained.

The next segment of the program deals with the influence of sensory perception on appetite and food choices. The narrators discuss the fact that the way in which food looks, smells, sounds, feels, and tastes can trigger the appetite even when a person isn't hungry or inhibit the appetite even when a person is hungry.

The narrators go on to examine the subconscious psychological motivations behind eating habits and food preferences and to illustrate how early associations of feelings with food are reflected in a person's eating habits and food choices in adolescence and adulthood.

One of the most common consequences of learned eating habits is obesity. The narrators discuss this, noting that weight problems are of special concern during adolescence, a time when emotional conflicts about appearance are most intense. They then suggest sensible approaches for dealing with weight problems during adolescence.

At the conclusion of Part Two, one of the narrators suggests keeping a log of all the foods that one eats during a week, the circumstances in which one eats them, and the feelings associated with eating them. This inventory can be helpful in bringing one's eating habits under conscious consideration and control.

Part Three: Food Groups: Four To Go

This part of the program is an introduction to the science of nutrition. It begins as a teenager drives into a gas station to buy gas for his car. As the teenager is looking under his car's hood, a man approaches and suggests that the teenager fill the car with water instead of gasoline, crankcase fluid, brake fluid, and so on. The teenager protests, pointing out that different substances have different functions and that trying to use one substance for all functions would ruin the machine.

The man who becomes the "teacher" for a lesson on nutrition, observes that the same is true for the human body. The body, like a machine in certain respects, requires different substances called "nutrients," which come from food.

The "teacher" causes scenes to appear in the rearview mirror to illustrate his remarks. The mirror shows the teenager with his friends at the hamburger stand having typical meals of hamburgers, french fries, and colas. Such meals provide some, but not all of the nutrients that the human body requires. The body needs a balanced diet of minerals, vitamins, proteins, fats, and carbohydrates to keep running smoothly.

The "teacher" then talks about the importance of eating a varied diet. Illustrations in the rearview mirror explain that different foods provide different quantities of nutrients, and so, by eating a wide variety of foods, one ensures that a wide variety of nutrients will be included in the diet.

The "teacher" discusses the specific functions of the various types of nutrients and introduces the four basic food groups. The Milk Group supplies calcium (a mineral), protein, fat, B vitamins, vitamin A, and vitamin D. The Meat and Fish Group supplies protein, B vitamins, and iron (a mineral). The Vegetable and Fruit Group supplies vitamin A, vitamin C, and various minerals. The Bread and Cereal Group supplies B vitamins, iron, and carbohydrates (a source of energy). At the end of Part Three, the "teacher" makes a number of suggestions about ways to incorporate eating a more varied diet into the teenager's lifestyle.

DISCUSSION QUESTIONS FOR PART ONE:
Food Choices, More Than a Matter of Survival

1. Harry and Sylvia raise several points about the difficulties of food shopping faced by today's consumer--rising food costs, changing information about food and nutrition, and the threat of a food shortage. Have any of these things affected you and your family? If so, how? If no, why not?

2. Harry and Sylvia mention some cultural and traditional occasions at which food plays a part. How do you think these traditional associations arose? Can you think of examples other than those given in the filmstrip?

3. Harry and Sylvia observe that food and mealtimes can be symbolic of feelings or ideas such as family unity, friendship, hospitality, status, and wealth. Give examples of foods and situations that illustrate these. How do you think these meanings came to be?

4. How much does advertising influence your choice of what to eat? Give some examples from your own life.

DISCUSSION QUESTIONS FOR PART TWO:
Food Habits: More Than Meets the Eye

1. Think of one food that you really detest and try to analyze why you don't like it-is it its taste, smell, texture, the way it looks, the way it makes you feel? Do the same for a food that you like very much.

2. What foods do you eat because they are good for you? Because your parents insist? When in the company of your friends? What foods are a special treat?

3. Do your eating patterns change when your mood changes? When you are anxious or depressed? In what ways?

4. How can keeping a food intake record help you to change your eating habits?

"WHY DO I EAT WHAT I DO?"

1. Each student complete the "Why Do I Eat What I do?" Worksheet.
2. Using the questions at the bottom of the sheet, discuss with one other person in your group.
3. Share your group's progress with the teacher.

"WHY DO I EAT WHAT I DO?"
Worksheet

1. List 20 foods that you have eaten during the last week on the chart on the next page.

2. Place a check mark under the appropriate column in response to these questions...

   In column 👄 check if this was a favorite food as a young child.

   In column 👥 check if this was a favorite food to eat with friends.

   In column :C: check if this was a food you have for celebrations.

   In column ☹ check if this was a food you eat for comfort when you're sad.

   In column ✋ check if this was a food you enjoy making and sharing.

   In column S check if this was a food you ate because it was served to you.

   In column E check if this is a favorite ethnic food of your family (from your ethnic background).

   In column TV check if this is a food you have seen advertised on TV

   In column L check if this is a food you've learned provides you with nutrients your body needs.

   In column R check if this is a food you ate in a restaurant.

3. Find one other person to discuss these questions with. Which columns on your chart had the most check marks?

   Besides those on the chart, are there other things that influence what you eat? (such as cost, religious beliefs, diet, etc.)

   What do you like about the factors which influence the foods you eat?

   What would you like to change?

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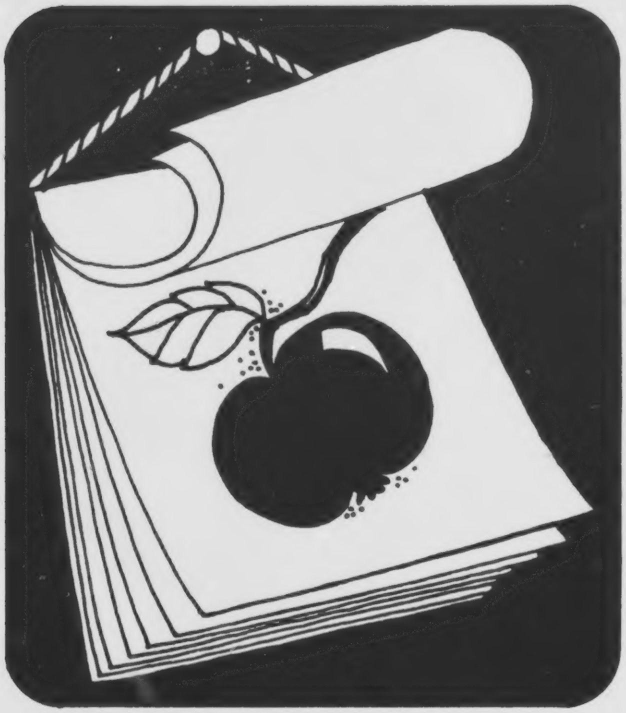
WHY DO I EAT WHAT I DO?

Foods You Eat	👄	👫	C	😟	🤲	S	E	TV	L	R
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

UNIT III

FOOD FOR ALL SEASONS OF LIFE



Throughout the life cycle, the nutritional needs of our bodies vary. In order to help the pre-schooler and teen enjoy good health, their nutritional needs that must be met. Students can learn the nutritional values of foods a pre-schooler ate or they ate during a 24 hour period with the aid of a computer.

FOIANA is an interactive computer program designed to help an individual assess the nutritional quality of foods eaten. The results can be used to determine whether the student's eating patterns need to be changed to increase the likihood of good health.

Goals

1. Ability to use the computer to analyze food intake.
2. Interpretation of nutritional analysis of a preschooler's food intake and of their own food intake.
3. Ability to make changes in own diet and to improve nutrition.

Intended Learner Outcomes

1. The student will gain knowledge of the relationship between nutrients and the four food groups.
2. The student will be able to record own food intake for one day and code it for computer input.
3. The student will be able to determine some changes which need to be made in own diet based on computer analysis of nutritional adequacy.
4. The student will be able to assess a preschooler's food intake utilizing the computer.
5. The student will be able to compare the nutritional needs of a preschooler and a teen.

Materials

Small Group Packets...

1. "Food For Growth and Well-Being" -- Filmstrip "Physical Development and Needs" from the Butterick Child Care Series. Caring for Pre-Schoolers
    a. Filmstrip projector
    b. Discussion questions for students
2. "Food Groups -- Where Do They Come From?"
    a. Food Comparison cards from Dairy Council
    b. Student Worksheets
3. "Analyzing a Pre-Schooler's Diet"
    a. Computer terminal/telephone

b. Computer user number--user number available in your school building. Contact the representative for the computer terminal in your school.

c. FOINANA User' Guide (extension Folder 454 available from Univ. of MN Agric. Extension Service, Room 3, Coffey Hall, Univ. of MN, St. Paul, MN

d. Resource people: parents of pre-schoolers

e. Food Item Dictionary

f. Student Sheets: FOINANA Input Sheets

The Computer Says...

g. Resources on functions of nutrients (posters or books such as Food Is More Than Just Something To Eat or posters on nutrients).

4. "Analyzing Your Own Diet" - Same as for "Analyzing a Pre-Schooler's Diet" except for parent and the worksheet "The Computer Says..." is adapted for teens

    a. Crossword Puzzle: The Computer Talks About Food

5. "Nutrition for the Life Cycle"

    a. Student and Pre-Schooler's Computer Analysis Print-out sheets

    b. Student worksheet

    c. Resource such as Food Is More Than Just Something to Eat

Content

Nutrition is a major influence on growth and development of children. Children need the right amounts and kinds of food in order to be healthy.

On the basis of their similar nutrient content, foods can be classified into groups. Nutrient-based food groups, are generally reliable as good nutrients.

Nutritional assessment is a way of deciding whether the nutritional needs of an individual are being met by the foods they eat. The first step in nutritional assessment is to find out what foods are eaten, such as by food record. The next step is to evaluate the diets by comparing them to nutritional standard such as the food groups or the Recommended Dietary Allowances (RDA). The RDA is an optimal intake of nutrients thought to be adequate for most healthy people in the U.S.. Nutrition assessment can be used to evaluate the diet of those children with whom you work, and as a basis for planning positive food experiences for children. FOINANA is an interactive computer program designed to help assess the nutritional quality of foods eaten.

Nutrition assessment can be used to evaluate your own diet. FOINANA computer program can help assess the nutritional quality of foods eaten. This assessment can help us identify ways we need to improve our diets.

The infant and the pre-school child need the same nutrients as the teenager, but in different amounts.

Learning Experiences Lessons

Food for Growth and Well-Being

1. Distribute each group packet "Food for Growth and Well-Being." As a small group, view a filmstrip on foods needed by the pre-schools (see listing under the materials). Using the discussion guide, discuss in groups the foods a child needs to grow and develop.

Food Groups - Where Do They Come From?

2. Divide students into small groups. They may remain in these groups for this entire section. Give each group a packet entitled "Food Groups--Where Did They Come From?". Have students complete task of making a list of ways the foods in each food group are alike.

Analyzing a Pre-Schooler's Diet

3. Distribute group packet "Analyzing A Pre-Schooler's Diet." Have a parent meet with the small group and share with them the foods eaten. The group will code for computer input and then run the FOINANA computer program to assess the nutritional value of foods eaten. Students will work together to identify the nutritional adequacy and deficiency of the pre-schooler's food intake.

Analyzing Your Own Diet

4. Distribute group packet "Analyzing Your Own Diets." Have students keep a record of what they eat for 24 hours. Then have them code the foods for computer input. Students should each complete the worksheet entitled "The Computer Says..." While waiting to use the computer students may complete the crossword puzzle which includes concepts from the FOINANA program. This activity may also be done in small groups so the students can assist one another. It would be desirable for students to share their goals with one another and set a date they will discuss the progress they are making to reach their goals.

Nutrition For the Life Cycle

5. Have students compare their own and preschooler's nutritional needs by completing packet "Nutrition for the Life Cycle."

Additional Resources

1. Invite a panel of community people to come to the class to talk about their differing food/nutritional needs. Examples may be: a pregnant woman, an elderly man, a person with special dietary needs such as diabetes.

2. Other filmstrips that may be substituted for Butterick Child Care are:

   #2 filmstrip in a Tupperware kit called Food to Grow On entitled "From Toddler to Teen"

   #1 or #4 from Parent's Magazine Child Health and Development kit on Food and Nutrition

   There are also filmstrips in these sets appropriate for infants. Others are available on nutritional needs during pregnancy.

3. Alternative computer programs could be used:

   RECIPE is a nutrition program which, for any given food list, will indicate how those foods meet requirements of calories, protein, carbohydrates, fat, iron, calcium, riboflavin, thiamine, niacin, and vitamins A and C for people of different age groups. The pre-schoolers' age group is not included in this one.

NUTALLY (Nutrient Tally) This computer program totals and graphs the nutrient content of a list of foods eaten, a menu or a recipe. Foods are coded from Agriculture Handbook No. 8 or 456 for entry into the program. All the foods in Agric. Handbook No. 8 plus some additional food products (over 2500 in all), are available to the user. The program evaluates the nutrient totals for a food list/.menu/recipe based on one of 27 Recommended Dietary Allowance categories selected by the user. The amounts of foods are measured in grams.

4. Additional activities relating to the computer analysis.

Instead of using the computer to help analyze food intake, the student could calculate all the records themselves.

If a student needs additional help with decimal coding, have him/her work on attached worksheet.

Students could do another follow-up analysis on the computer after they have been working on their individually set goal.

If obesity is identified as a need to work on, the student could keep a more detailed dietary behavior record. See attached example or refer to James M. Ferguson, Habits Not Diets, Bull Publishing Co., P.O. Box 268, Palo Alto, CA 94302.

INTRODUCTION TO THE BEHAVIORAL CONTROL OF WEIGHT - HABIT AWARENESS

INSTRUCTIONS FOR FILLING OUT THE FOOD DIARY - Week One

Time: Starting time for a meal or snack.

Minutes spent eating: length of the eating episode in minutes.

M/S: meal or snack: indicate type of eating by the appropriate letter, "M" or "S".

H: hunger on a scale of 0 to 3. 0 = no hunger, 3 = extreme hunger.

Body Position: 1 - walking
2 - standing
3 - sitting
4 - lying down

Activity while eating: record any activity you carry out while eating, such as watching television, reading, or sweeping the floor.

Location of eating: Record each place you eat; for example, your car, kitchen table, living room couch.

Food type and quantity: Indicate the content of your meal or snack by kind of food and quantity. Choose units of measurement that you will be able to reproduce from week to week. Accuracy is not as important as consistency.

Eating with whom: Indicate with whom you are eating, or if you are eating that meal or snack alone.

Feelings before and during eating: Record your feelings or mood immediately before or during eating. Typical feelings are angry, bored, confused, depressed, frustrated, sad, etc.. Many times you will have no feelings associated with eating. In this case, write down "none".

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EATING BEHAVIOR ANALYSIS FORM

MINUTES SPENT EATING

	Meal	Snack
0- 5		
5-10		
10-15		
15-20		
20-30		
over 30		

BODY POSITION WHILE EATING

	Meal	Snack
Walking		
Standing		
Sitting		
Lying Down		

DEGREE OF HUNGER

	Meal	Snack
0-none		
1-some		
2-hungry		
3-extreme		

ACTIVITIES WHILE EATING

	Meal	Snack
Talking		
Listening to music or radio		
Reading a Book paper		
Watching TV		
Cooking-working-in kitchen		
Working - Studying		
Other		

EATING PLACE RECORD

Car

Office; desk

Den-TV Room

Living Room

Designated Eating Place

Bedroom

Kitchen (not at table)

Other

TIME OF DAY	TIME OF EATING
a.m.	
5- 6	
6- 7	
7- 8	
8- 9	
9-10	
11-12	
p.m.	
12- 1	
1- 2	
2- 3	
3- 4	
4- 5	
5- 6	
6- 7	
7- 8	
8- 9	
9-10	
10-11	
11-12	
a.m.	
12- 1	
1- 2	
2- 3	
3- 4	
4- 5	

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INTRODUCTION TO THE BEHAVIORAL CONTROL OF WEIGHT-HABIT AWARENESS

Day of Week ______________________ Name ______________________________

Time	Minutes Spent Eating	M/S	H	Body Position	Activity While Eating	Location of Eating	Food Type & Quantity	Eating With Whom	Feeling While Eating
6:00									
11:00									
4:00									
9:00									

M/S: Meal or Snack H: Degree of Hunger (0 = None, 3 = Maximum)

Body Position: 1 = Walking, 2 = Standing, 3 = Sitting, 4 = Lying Down

Adapted From: James M. Ferguson, Habits Not Diets, Bull Publishing Co., P.O. Box 268, Palo Alto, CA 94302 11976

DECIMAL CODING FOR COMPUTER

Directions: Change the food items below to decimal units for use on the computer. (Example: 1 glass of milk equals 1.0 cup.)

	FOOD ITEM	UNIT CODING FOR COMPUTER	
1.	One serving of beets	_____	Beets
2.	Two pieces of cake	2.0	_____
3.	Butter (on bread)	_____	Pat
4.	Candy, milk chocolate	.50	_____
5.	Chicken, fried (three pieces)	_____	_____
6.	Crackers, six	_____	_____
7.	Coke, (16 oz.)	_____	_____
8.	Milk (one glass)	_____	_____
9	One piece of toast	_____	_____
10.	One bag of potato chips	_____	_____

Note: Refer to "Food Item List" to complete the above problems. All food items _must_ be in decimals and according to proper unit.

Computer:

THE MECC "UNIVAC" COMPUTER

Before doing these programs on the computer, check with the computer resource person to see which computer system is working. Make sure you have a computer resource person to help out with any problems!

How to log on:

1. Turn coupler to ON, HALF and ASC.
2. Turn terminal to LINE
3. Dial the central computer telephone number in your region. If no answer, the computer is down, try again in five minutes. The MECC number is 636-8661
4. Place telephone receiver in coupler. Make sure phone cord is in proper position.
5. Hit RETURN key. If no response, check steps 1 and 2 or dial the central computer telephone number again.
6. The computer responds with PLEASE . . .
7. After the carat sign type HELLO and your user number. If computer types PLEASE . . . try again and:
   -be sure to type the letter O, not zero, in HELLO.
   -be sure to space after HELLO.
   -do not use the CONTROL key for anything.
8. After the carat sign type OLD name* where "name" is the name of the game or program you want. If computer types NOT FOUND IN PF, check to see if your typed the *.
9. After the next carat sign type RUN (or NHR for No Heading Run). If response time slows down, the computer is going down.

HELPFUL HINTS:

If you type a wrong character, hold SHIFT and type the letter O. (Back arrow).

If computer types COME AGAIN, review directions and try again.

To find out about programs - OLD LIBINF*; RUN (or NHR)

"Stop" or "Log Off" - To stop a program, type STOP after a ? Otherwise, hit the BREAK key.

To sign off, type BYE after the carat . Wait a minute until it signs you off. THIS IS EXTREMELY IMPORTANT!! Do not hang up the phone until you have been signed off by the computer.

Questions may be referred to MECC, 376-1109, or the Instructional Timeshare Computer Office (ITSCO), 348-6013, or your regional computer resource center .

FOOD FOR GROWTH AND WELL-BEING

Goal: The small group will view the filmstrip and work cooperatively together to complete the enclosed worksheet on nutritional needs of the pre-schooler. Each person in the group should be able to explain the answers to each question if asked.

1. Set up the filmstrip projector with the filmstrip "Physical Development and Needs" from the Child Care Program 4 Caring for Pre-Schoolers.
2. In viewing the film, think about this question: What are the foods a child needs to grow and develop? Discuss briefly in your group before viewing the filmstrip?
3. View the filmstrip.
4. Work together to answer the questions on the enclosed worksheet.
5. Have the teacher check your group's progress.

DISCUSSION QUESTIONS FOR "PHYSICAL DEVELOPMENT AND NEEDS"

As caregivers of children, why should you be concerned about what foods a child eats?

What are some of the nutrients a child needs to grow and develop?

Foods that provide these nutrients are often divided into four food groups. What are they? Name some foods in each one.

Why is it important to build positive attitudes toward food and mealtime at an early age?

How could we try to determine if a child is getting adequate nutrition?

FOOD GROUPS–WHERE DO THEY COME FROM?

Goal: The small group will be able to work cooperatively together to complete the enclosed worksheet. Each person in the group should be able to explain the answers to each question asked. Each should be aware of the relationship between nutrients and the four food groups.

1. Remove the contents of this packet. As a group, sort the food cards into the four food groups (and extras).
2. Complete the enclosed worksheet as a group.
3. In your next task, you will be using the computer to help you analyze a preschooler's diet. The computer has information stored in it. When you type in the foods that were eaten in one day, it will "digest" them by doing much the same process that you have done in this packet. It will sort the foods into the four food groups. Then is will add up the percentages of the U.S. RDA for calcium, iron, Vitamin A and Vitamin C for the foods eaten.
4. Have your teacher check on your group's work.

STUDENT WORKSHEET FOR
FOOD GROUPS -- WHERE DO THEY COME FROM?

On the food cards you have just sorted, there are colored bars. These colored bars represent the percentage of the U.S. RDA in one serving of that food for the nutrients which are listed at the bottom of the food card. Recommended Dietary Allowances (RDA) are the amounts of nutrients essential to meet the known nutritional needs of practically all healthy persons in America. Scientists have determined these allowances for 17 different population groups. They are based on age, weight, sex, and physical conditions, such as pregnancy and lactation. The United States Recommended Daily Allowances (U.S. RDA) are a set of simplified RDA. By eating 100 percent of the U.S. RDA most people can be relatively sure they are eating enough of the listed nutrients.

Look at the food cards in the Milk Group. Compare the food cards in that group while looking at the colored bars. How are these cards similar? Write your group's answer below...

What is similar about the foods in the Meat Group?

What is similar about the foods in the Bread and Cereal Group?

What is similar about the foods in the Fruit and Vegetable Group?

If you have "extra" foods, what is similar about them?

Using these food cards, select the foods your group might have for one meal. Write down the names of these foods below. Then, look at the colored bars to find out the percentage of the U.S. RDA for the listed nutrients. Record this below.

PERCENT OF U.S. RDA

FOODS	CALORIES	PROTEIN	VITAMIN A	VITAMIN C	THIAMIN	RIBO-FLAVIN	NIACIN	CAL-CIUM	IRON
Example: Chocolate Milkshake	19%	27%	14%	5%	7%	33%	3%	38%	4%
TOTALS									

Would this meal provide you with about 33% of the U.S. RDA for each nutrient?

ANALYZING A PRE-SCHOOLER'S DIET

Goal: The small group will be able to analyze the nutritional adequacy of a pre-schooler's diet using the computer. Each person in the group should be able to explain what was done if asked.

1. Work together with the teacher to find a parent of a pre-schooler who will record what his/her child eats for 24 hours. If possible, have the parent meet with the group during class to discuss it.

2. If the parent has not already done so, fill out the FOINANA Input Sheet with the foods eaten, amounts, and where and with whom the child ate.

3. Use the Food Item Dictionary to code the foods and amounts for computer input. (Complete the FOINANA Input Sheet.)

4. Ask the teacher to help you get started using the computer terminal. Use the instructions the teacher has for getting access to the FOINANA program. Follow the instructions given by the computer to type in the foods eaten. Complete the computer program.

5. Use the enclosed worksheet to help you interpret the computer printout.

6. Have your teacher check your group's progress.

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FOINANA
Food Intake Analysis

FOINANA Input Sheet

Modified from:
Extension Folder 454C-1979

Agricultural Extension Service
University of Minnesota

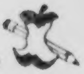
Name ______________________________

Age __________

Sex __________

During the last 24 hours, I ate...

Where Child Ate	Who Child Ate With	1 Meal Code	2 Food Item	3 Amount	4 Meal Code	5 Food Item No.	6 Amount Eaten
Example: At home in kitchen	Mother & brother	B	Orange Juice	1/2 cup	B	220	.5 Cup



Where Child Ate	Who Child Ate With	1 Meal Code	2 Food Item	3 Amount	4 Meal Code	5 Food Item No.	6 Amount Eaten

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NAME ______________________

THE COMPUTER SAYS...

Look at your computer print-out. How well did the child do at eating foods which would give the nutrients his/her body needs? Fill out the sheet below...

*Note: The number of servings recommended are based on adult size servings so will be larger than the child needs. Allow 1/3 or 1/2 of adult size servings.

FOOD GROUPS

MILK GROUP

No. Servings Recommended____

No. Servings Child Ate ____

If you find that changes are needed in what the child eats from this group, what would you suggest...

MEAT GROUP

No. Servings Recommended____

No. Servings Child Ate ____

If you find that changes are needed in what the child eats from this group, what would you suggest...

FRUIT AND VEGETABLE GROUP

No. Servings Recommended____
No. Servings Child Ate ____

If you find that changes are needed in what the child eats from this group, what would you suggest...

BREAD AND CEREAL GROUP

No. Servings Recommended____
No. Servings Child Ate ____

If you find that changes are needed in what the child eats from this group, what would you suggest...

OTHER FOODS...

There are no recommendations for extra foods. Go to the next page and look at the calories the child ate - that will give you help to know if the child has had too many extras.

CALORIES

Number of calories recommended for child's age _____.
(This may vary depending on body, activities, etc.)

Number of calories child ate _____

Are there any changes you would like to suggest in the number of calories the child eats...

Did child have...
(circle one)

Too many

Not enough

Just right

- -

FOUR NUTRIENTS

Nutrients which are most often lacking in American diets are:
iron, calcium, vitamin A, vitamin C. How did the child rate?

Recommended Dietary Allowance (RDA) _____

Amount child ate _____

Did child have... To much

(circle one) Not enough

Just right

What is one thing iron does in the body?

____

What are some foods the child eats that are good sources of this nutrient?

____

____

____

____

Recommended Dietary Allowance (RDA) _____

Amount child ate _____

Did child have... To much

Not enough

(circle one)

Just right

What is one thing calcium does in the body?

____

What are some foods the child could eat that are calcium?

____

____

____

____

Recommended Dietary Allowance (RDA) _____

Amount child ate _____

Did child have... To much

(circle one) Not enough

Just right

What is one thing vitamin A does in the body?

____

What are some foods the child could eat that are good sources of Vitamin A

____

____

____

____

Recommended Dietary Allowance (RDA) _____

Amount child ate _____

Did child have... To much

Not enough

(circle one)

Just right

What is one thing vitamin B does in the body?

____

What are some foods the child could eat that are good sources of Vitamin C?

____

____

____

____

Look at the columns "Where child ate" and "Who child ate with". Did this child eat part of his/her foods in a child care center?

If you were working with this child in a child care center, what are four foods which would be important for this child to have a good experience with?

Lesson 4

ANALYZING YOUR OWN DIETS

Goal: The student will be able to record their own food intake complete the computer analysis of their diet, complete the worksheet to help interpret the computer print-out and determine some changes which need to be made in own diet. The students in the small group will work together cooperatively to help each other when needed.

Each student:

1. Use the enclosed form to record what you eat for 24 hours.
2. Use the Food Item Dictionary to code the foods you ate for computer input.
3. Use the computer to run the FOINANA program to analyze the foods you ate.
4. Complete the enclosed worksheet to help interpret the computer print-out. Complete the goal sheet. Share your goal with at least one other in your group and set a date when you will talk about progress you are making toward your goal.
5. Help others in your group if they need it. While you are waiting to use the computer terminal, complete the crossword puzzle "The Computer Talks About Food."

NAME ____________________ for NUTRITION

THE COMPUTER SAYS...

Look at your computer print-out. How well did you do at eating foods which would give the nutrients your body needs? Fill out the sheet below...

FOOD GROUPS

MILK GROUP

No. Servings Recommended_____

No. Servings You Ate _____

If you make changes in what you eat from this group, what could you do...

MEAT GROUP

No. Servings Recommended_____

No. Servings You Ate _____

If you make changes in what you eat from this group, what could you do...

FRUIT AND VEGETABLE GROUP

No. Servings Recommended_____
No. Servings You Ate _____

If you make changes in what you eat from this group, what could you do...

BREAD AND CEREAL GROUP

No. Servings Recommended_____
No. Servings You Ate _____

If you make changes in what you eat from this group, what could you do...

OTHER FOODS...

There are no recommendations for extra foods. Go to the next page and look at the calories you ate - that will give you help to know if you've had too many extras.

Recommended Dietary Allowance (RDA) _____

Amount you ate _____

Did you have... (circle one)

To much

Not enough

Just right

What is one thing Vitamin A does in the body?

____

What are some foods you will eat that are good sources of Vitamin A?

____

____

____

____

Recommended Dietary Allowance (RDA) _____

Amount you ate _____

Did you have... (circle one)

To much

Not enough

Just right

What is one thing Vitamin C does in the body?

____

What are some foods you will eat that are good sources of Vitamin C?

____

____

____

____

ROLE MODEL RATING

As a child care worker and model for children, how would you rate your food choices? Place a mark on the line below where you would rate yourself?

Many changes needed ______________________________ No change needed

Where would you like your rating to be...Mark it below

Many changes needed ______________________________ No change needed

CALORIES

No. of calories recommended for your age _____
(This may vary depending on your body, activities, etc.)

No. of calories you ate _____

Are there any changes you would like to make in the number of calories you eat...

____

Did you have...
(circle one)

Too many

Not enough

Just right

FOOD GROUPS

Nutrients which are most often lacking in American diets are:
iron, calcium, vitamin A, vitamin C. How did you rate?

____

Recommended Dietary Allowance (RDA) _____

Amount you ate _____

Did you have... To much

(circle one) Not enough

Just right

What is one thing iron does in the body?

____

What are some foods you will eat that are good sources of this nutrient?

____

____

____

____

____

Recommended Dietary Allowance (RDA) _____

Amount you ate _____

Did you have... To much

(circle one) Not enough

Just right

What is one thing calcium does in the body?

____

What are some foods you will eat that are good sources of calcium?

____

____

____

____

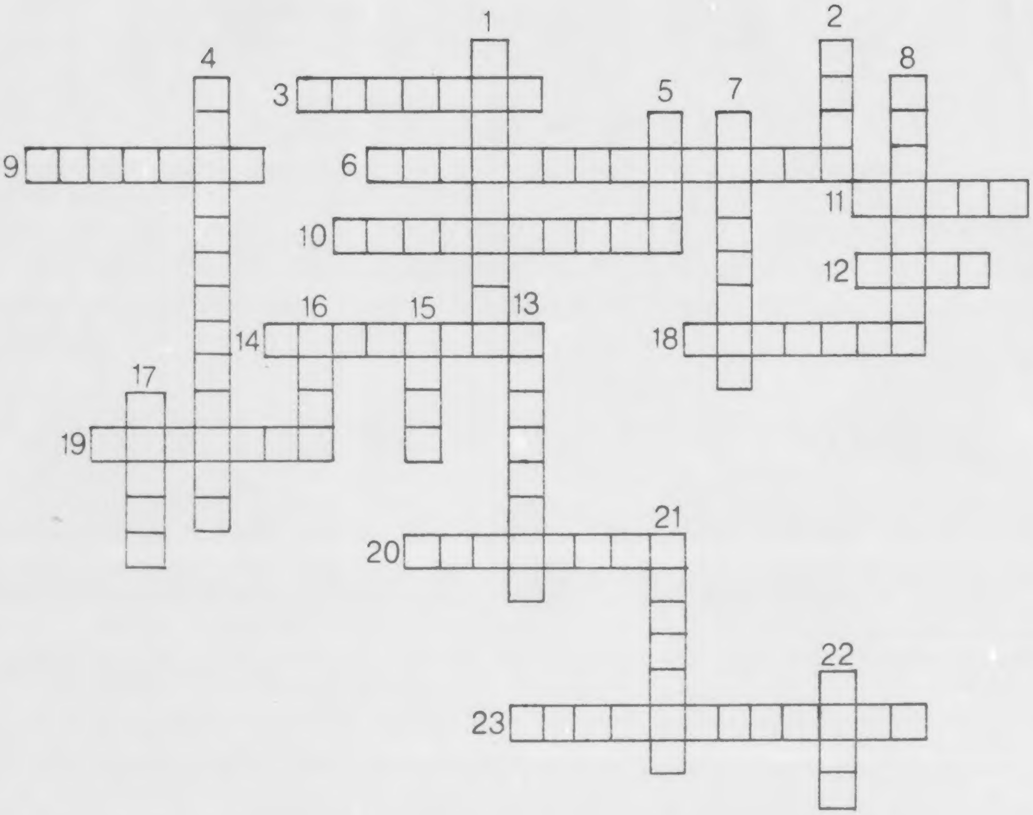
YOUR OWN GOAL

What is one change that you will try to make in what you eat?

Look back at your FOINANA Input Sheet under "Where I Ate" and "Who I Ate With." Do you think these factors will help you make the change?

If your answer is No, what can you do about where you eat to help you make the change you want?

Could the people you eat with help you make the change?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22
23

Nutrition
Fats
Computer
Vitamin C
Cereal
Serving
Balanced Diet

Poultry
Calcium
Eggs
Vitamins
Fish
Meat
Iron
Protein

Vegetables
Carbohydrates
Four Food Groups
Water
Calories
Breads
Minerals
Milk

NAME ________________

Is all this information the computer gives to you puzzling? Here's a crossward puzzle to help you learn more about these terms.

ACROSS

3. A mineral in milk which helps build strong bones and teeth.
6. A useful guide for planning meals to include all nutrients. (three words)
9. In the meat group of the four food groups. Duck, capon, turkey, and chicken are some types.
10. Escarole, carrots, and beets are some examples. Can be eaten fresh or cooked, contain plenty of vitamins and some minerals.
11. Liquid which helps regulate body temperature. Everyone should have plenty every day.
12. Grow in water, is low in calories and a great source of protein. Is included in the meat group of the four food groups.
14. Oranges are a good source of this nutrient.
18. Oatmeal is one. Rich in carbohydrates and many of the B vitamins. Popular with milk for breakfast.
20. Sometimes called the "structural framework" of the body because these are the major part of bones and teeth. Some are also used to make healthy blood and other body fluids. Iron and calcium are some examples.
23. All the foods a person eats to provide a good supply of the vitamins, minerals, protein and other nutrients needed for good health. (two words)

DOWN

1. The science of food as it relates to optimal health and performance.
2. Food substances which do not dissolve in water. These nutrients add flavor to food.
4. Nutrients contained in many foods, especially in the bread and cereal group of the four food groups.
5. Products of chickens which are popular for breakfast.
7. It can store large amounts of information which can be recalled.
8. A group of nutrients which help all other nutrients do their job. Usually known by letter names, for example, A, C.
13. Measures of energy provided by food. Everyone needs different amounts depending on age, body size, and amount of activity. Dieters count them.
15. A food product rich in protein, the nutrient necessary for building and repairing body tissues. Beef, pork, and veal are some types.
16. Needed for making hemoglobin in the blood which carries oxygen to the cells. It is one of the minerals without which one becomes anemic.
17. A food product rich in carbohydrates. Used for sandwiches.
21. One slice of bread, one cup of milk, and $1/2$ cup of vegetables are examples of one ______.
22. Beverage from animals which is rich in protein and minerals.

Adapted from Food: A Supernatural Resource, National Dairy Council

NUTRITION FOR THE LIFE CYCLE

Goal: The small group will work cooperatively together to compare some nutritional needs of the pre-schooler and of a teenager. Each person in the group should be able to understand so that he/she can explain the answers to each question if asked.

1. Use one member's computer print-out from his/her food intake analysis and the print-out from the pre-schooler's analysis, to provide some of the information for the enclosed worksheet.
2. Complete the remainder of the worksheet using additional resources as needed.
3. Have the teacher check your group's progress.

NUTRITION FOR THE LIFE CYCLE

As a small group, look at the computer print-outs which analyzed what one of you ate and what the pre-schooler ate. Use these to fill out the information needed below.

	CALORIES	PROTEIN	IRON	CALCIUM	VITAMIN A	VITAMIN C
Recommended Dietary Allowance for Pre-schooler						
Recommended Dietary Allowance for Teenager						

Is there a difference? YES NO (circle one)

If you found there to be a difference, list below what your group thinks are some reasons for this difference.

(Possible resources to help: Food Is More Than Just Something To Eat or Chapters 15 and 26 of Child Nutrition and Health or refer to the filmstrip "Physical Development and Needs" viewed earlier.)

UNIT IV

A CHILD'S EYE VIEW OF FOOD

To effectively teach nutrition to young children requires not only a knowledge of food but also of the behavior of young children. Foods vary in their colors, textures, flavors, sizes, cultural and emotional associations, and nutritional value. Children vary in the amount, kinds, range and forms of foods they will eat. Putting together children and food in healthy combinations often require skill, sensitivity and imagination. This unit is designed to help students become aware of some of the food variables that need to be considered in the eating experience.

A CHILD'S EYE VIEW OF FOOD

Goals

Awareness of factors that affect the appeal, safety, and palatibility of food for the young child.

Intended Learner Outcomes

1. Students will be able to identify some of the factors that affect the appeal, safety and palatibility of food for the young child.

2. Students will be more appealing to the young child.

Materials

Newsprint sheets
Four activity sheets with support materials
Filmstrip: "Food as Children See It" General Mills
Large newsprint Sheets - one for each of the interview questions in Activity 1
Family day care parents and day care center cooks to interview

Content

Characteristics of children and of food affect how the two will blend at a particular time.

1. Children differ in their reactions to food. The same child, at different times, has different reactions to food.

    a. A young child's appetite normally will vary from day to day and meal to meal similar to an adult.

    b. Growth spurts and lags affect the amount of food a child needs.

    c. A child's personality affects acceptance of new and different foods.

    d. General health, emotional state, and level of fatigue all affect what kinds and how much food are eaten.

    e. Children may learn food likes and dislikes through watching adult models.

    f. Certain racial and ethnic groups have different traditions for particular foods.

    g. Children learn through their senses and are attracted to foods that appeal to their senses.

   h. The different needs and behaviors of children at different developmental levels will affect how a child approaches eating.

2. Variety comes not only from the many choices of nourishing foods, but also from the interesting ways each food can be prepared and served.

   a. Brightly colored fruits and vegetables add color interest to a child's food.

   b. Most children prefer mildly flavored foods and enjoy mild seasonings. Mild, cart and sweet compliment one another; strong and/or unfamiliar flavors need to be gradually introduced for best results.

   c. The texture of foods affects food acceptance. Stringy, lumpy, sticky, or very dry foods may be rejected. Crunchy foods are fun to chew and make nice noises.

   d. Finger foods discourage use of knife and fork in three-, four-, and five-year-olds!

   e. Surprises and decorations make eating more fun and encourage the reluctant eater.

   f. Some foods cause allergic reactions in sensitive children and need to be introduced gradually and monitored closely.

   g. How do child-sized protions encourage children to eat a variety of foods?

   h. Foods such as nuts, popcorn, and sometimes even raisins may result in choking and therefore, are discouraged for preschool children.

   i. Foods are part of the whole social, emotional, cultural and ethnic life of a young child and cannot be treated separately.

Learning Experiences
Lessons

Interview

1. Students interview a family day care provider, parent, or a cook at a day care center. Tabulate and critique results of the interview and arrive at some general guidelines for adapting foods and eating experiences at the needs of the young children.

"Food As Children See It."

2. View filmstrip "Food as Children See It." Critique sample menus for color, shape, texture variety, and nutritive content. Discuss concept and use of term "child size serving." Optional activity: measure out child-size portions of foods from basic four food groups.

Debate

3. Debate issues involving young children and foods. Suggestions are given for exploring pros and cons. Parent may serve as reactors.

Problems to Ponder

4. Respond to problem vignettes with ideas for handling situations. Evaluation is to be based on utilization of principles covered in unit. Sensitivity to child's needs and resourcefulness in adapting to these needs will be rated highly. Share with a small group or use this for grading purposes.

Lesson 1

"PUTTING CHILDREN AND FOOD TOGETHER"

SPEAC for NUTRITION

INTERVIEW

1, 5 People
1/2 Hour Interview

Part 1
Instructions:

In this activity, you will be interviewing a family day care parent or a cook at a day care center. The purpose of the interview is to discover some of the things about food that a caregiver must be aware of in planning eating situations for young children. In talking to these people, it will also be possible to find out some ways they have discovered to make foods more attractive and acceptable to young children.

The following questions are just guides or beginnings. You will no doubt think of others and will gain a great deal from careful listening.

Interview Questions

1. What are some characteristics of foods and of children that affect whether or not a child will eat a particular food?

Things About Food	Things About Children

2. What seems to be some foods that children enjoy eating? What are some foods that they tend to dislike?

Favorite Foods	Not-So-Favorite Foods

3. What are some ways that you introduce unfamiliar foods to the children?

4. What are some ways that you have found to make foods more appealing and acceptable to young children?

5. Which foods do you consider to be unsafe for young children?

6. How do you decide if a child has eaten "enough" of certain foods?

7. Other questions and information about adapting food to children and introducing children to new foods.

5, 10, 20 Students
1/2 Hour

Part 2
Instructions:

After you have completed your interview, write the information you have gained on the large newsprint sheets that have been prepared for each question. Note the information that has been gained by the other students in your class. Discuss the following questions with other students.:

1. What are some things that were mentioned by several of the people interviewed? Why do you think they found these things important to bring up?

2. What attitudes and values do the people interviewed seem to hold about food? About children? How do these affect what they do with eating experiences in their home or center?

3. Which of the practices that were suggested seem to be consistent with what you have learned about setting up healthy learning environments for children? Which practices might result in unexpected negative effects on the children?

4. What differences were suggested by the survey results?

Lesson 2

"FOOD AS CHILDREN SEE IT"

Filmstrip

SPEAC for NUTRITION

1, 5 Students
20 Minutes

Instructions:

1. View the filmstrip "Food As Children See It."

2. Tell how you think children would react to the following menus. What could you do to make them more appealing and/or more nutritious to young children?

Menu #1

Chicken Breast
Mashed Potatoes
Cream Corn
Lemon Jello
Milk

Menu #2

Toast
Oatmeal
Apple Juice

Menu #3

Tomato Soup
Grape Juice
Milk
Ice Cream

3. What is a "child-size serving?" Why is it different from an adult-size serving? Why is it important to know about how much makes up a child-size serving of, for example, vegetables, milk, meat?

"HOW DO SERVINGS MEASURE UP?"

OPTIONAL ACTIVITY:

4, 5 Students
15 Minutes

Instructions:

Work in groups of 4-5. Measure or weigh the following foods from the Basic Four Food Groups into one child-size serving. Fill in the blanks with the amount that makes one serving. Use the Child Care Food Program requirements to determine food components and serving sizes.

Milk Group 1 serving =

Milk ____________
Cheese ____________
Cottage Cheese ____________

Meat Group 1 serving =

Cooked Hamburger ____________
Baked or Refried Beans ____________
Peanut Butter ____________

Fruits and Vegetables 1 serving =

Orange Juice ____________
Green Beans ____________
Apple Sauce ____________
Raisins ____________

Bread and Cereal 1 serving =

Tortilla ____________
Enriched Bread ____________
Rice ____________
Breakfast Cereal ____________
Corn Bread ____________

Lesson 3

FOOD ISSUES AND KIDS

DEBATE DUEL

SPEAC for NUTRITION

5 Students
1 Hour

Instructions:

1. In this exercise, two people will debate in favor of a position, two people will debate against a position and one person will serve as moderator, introducing the participants, keeping time, and summarizing what is said.

2. Select a topic and decide who will debate the pro position and who will debate the con position.

3. Prepare a three minute statement supporting your position. Decide what information you will need to strengthen your statement and consult the reference books for this material. The moderator will help the debators select and find the information needed. He/she will not share one group's approach with the other group.

4. Format of debate: coin will be flipped to see what side goes first.

   - Position "A" presents five minute statement.
   - Position "B" presents five minute statement.
   - One-two minute huddle while teams decide what they will put in rebuttal or response statement.
   - Position "B" presents one-two minute rebuttal.
   - Position "A" presents one-two minute rebuttal.
   - Moderator summarizes what has been said and comments on the truth, logic, relevancy (whether information is connected to topic) of what each group has said.
   - Optional: A parent may comment at this point as to whether he/she has found the positions realistic in his/her experience with own children and friends.

OPTIONAL ACTIVITIES:

The debate topics may be developed and presented in other ways. Some suggestions for these ways are:

1. Displays that may be featured in classroom, parent classroom, school display cases, lunchroom, or at school-parent meetings.

2. Articles that are printed in parent newsletter.

3. Oral presentation or demonstration for parent group, radio or TV.

DEBATE TOPICS

PRO	TOPIC	CON
Children should be required to clean their plates (related topics: child-size portions, self-discipline, waste).	A. Cleaning Plates	Children should only eat what they want to (related topics: obesity, children's rights, mealtime atmosphere).
Sweets are good rewards for doing doing well or for eating other more nutritous foods (related topics: sweets better than other rewards or punishments, everyone wishes for some reward or other - children respond well to sweets).	B. Sweets	Sweets should not be used as rewards (related topics: obesity, bad habits, self-discipline, physical harm to teeth and body).
Caregivers should always eat with the children (related topics: social benefits, educational experience, opportunity to model good eating habits).	C. Eating Together	Snack and meal times are good clean-up, set-up and "breather" times for staff (related topics: reality of room up keep, pressures on staff, time when little supervision needed, chance for children to interact by selves, staff observe).
Children need to be taught good nutrition (related topics: forces of advertising and amount of junk foods around, value of knowing why nutrition is important).	D. Nutrition Education	Children will eat right if a variety of good foods is made available to them (related topics: eating as natural experience, eating learned in some way as other concepts in preschool).
Children need to learn to eat the the same foods as adults (related topics: time and energy of caregiver, number of meals eaten out of restaurants, preparation for adulthood).	E. Food Forms	Food should be adapted to children (related topics: food as learning tool, importance of success experiences, minimal changes needed).
Children should learn about and eat eat the foods from their own culture (related topics: importance of cultural identity).	F. Nationality Foods	Children need to learn to eat the foods that most people eat (related topics: time and energy of caregivers).

Lesson 4

PROBLEMS TO PONDER—CHILDREN AND FOODS

Individual Students
1/2 Hour

Explain in a few words how you would handle the following situations:

1. Tammy is allergic to eggs. Vanilla custard, which contains a lot of eggs, is served for lunch at the day care center where you work.

   a) How would you help make this situation easier for Tammy?

   b) Would you say anything to the other children about the problem?

   c) Why or why not?

2. The children in the family day care home where you assist are given $^1/_2$ cup milk for lunch each day. You notice that many of the glasses are barely touched. Think about some ways that you might handle the situation? Which do you think is the best solution?

   Why?

3. Dear Abby:

   My three-year-old son won't eat at meal time and he's asking for food an hour later. I'm afraid that he's not getting enough to eat so I let him eat when he is hungry. I've just read that he should finish what's on his plate at dinner. What do you think I should do?

   Worried

4. Maria is the daughter of Spanish-speaking Mexican Americans. She usually picks at her lunch and does not eat most of it. She says that the food is not like that which she eats at home and she does not like it. In the afternoon she often appears listless and complains that she is hungry. If you were a worker in Maria's day care center, how would you handle this situation?

UNIT V

PUTTING THE PUZZLE TOGETHER

Snacks are an important part of a pre-school child's daily nutrition. Because stomachs are small and cannot hold a full third of the daily nutritional requirements at each meal, pre-schoolers usually rely on snacks for both calories and the important nutrients that help them grow and thrive. Snacking habits established in early years have important consequences for later life.

Snacks also provide an ideal time for "trying out" new foods, for giving pre-schooler's opportunities to use food preparation skills adapted to their skill level, and for having times to regroup, relax and engage in pleasant conversation. This unit provides an opportunity for teens to integrate and apply the concepts they have developed in the preceding units.

PUTTING THE PUZZLE TOGETHER

Goals

1. Awareness that snacks are an integral part of a pre-schooler's total diet and educational life.
2. Awareness of the child care food program for providing healthy snacks.
3. Synthesis of the various facets of food and nutrition into planning and implementing a shock experience for young children.

Intended Learner Outcomes

1. The student will be able to explain the role of snacks in a child's nutritional and educational life.
2. The student will be able to plan at least five snacks which meet the guidelines of the Child Care Food Program as well as conform to the other principles learned in other sections of this unit.
3. The student will be able to devise and use an evaluation process for a snack experience. This process encompasses the principles of viewing eating as a total experience for children.
4. The student will be able to plan, implement, and evaluate a total snack experience for young children.

Materials

Activity sheets and support materials
Dairy Council Food Comparison cards
Hutchins, Child Nutrition and Health
Olmsted County Council for Coordinated Child Care, Children, Food, and Family Day Care
Various references with example for healthy snacks.

Content

The content for this section is a synthesis and review of the content from the other sections. See the "Introduction" of this section for a summary.

The Child Care Food Program is a federally funded program providing nutritious meals for children who are not in school. The Child Care Food Program provides reimbursement to child care facilities for food related expenses. In return the food served must meet the USDA portion and content requirements.

The Child Care Food Program stipulates that snacks will be comprised of two of the following four components:

Juice may not be served when milk is the only other component.

1. Milk
2. Vegetables and fruits
3. Bread and bread alternatives
4. Meat and meat alternatives

Learning Experiences Lessons

Cardboard Snacks

1. Using Dairy Council food cards, students simulate possible snacks. With help of questions from "Snack Checklist," students examine their snack for various considerations when planning foods for young children.

Planning Snacks for Children

2. a. Students read Chapter 19 in *Child Nutrition and Health* and information from *Children, Food, and Family Day Care* pp. 110, 115, 117-118, 141-142.

    b. Answer discussion questions individually or in groups.

    c. Teacher sets up a display of different fruit juices and drinks with price apparent. Number the beverages for easy reference.

    d. Students develop five snacks which meet the guidelines of the Child Care Food Program and other principles they have learned.

You Be the Judge

3. Students devise an evaluation form or process which synthesizes the principles they have learned for planning food experiences for young children. They test evaluation form or process on their five snack plans developed in step #2.

Putting It All Together

4. a. Using one of the snack plans which evaluates favorably, or a new plan, students prepare the snack for use in the child lab and then conduct the experience. Using the evaluation

device developed in step #3, they evaluate the experience, give the completed evaluation to teacher to receive feedback from early childhood and secondary teacher.

b. Invite a staff person who administers Child Care Food Program funds to class to explain the program and tell the services and stipulations. He/she could bring copies of some of the forms and students could practice filling them out for hypothetical situations.

c. Some of the more unique snack ideas could be included in the parent newsletter.

Lesson 1

CARDBOARD SNACKS

5 Students
1/2 Hour

Instructions:

1. Use the Dairy Council's Food Comparison Cards and put together what you consider to be a good snack for young children. Consider nutrition, but also think about the other things which have been discussed concerning food experiences for young children.
2. After you have selected the foods for your snack, show what you have chosen to the rest of your group and tell why you chose them.
3. Examine the snack you have chosen using the questions that are written on the "Snack Checklist". Are there some changes you could make in your snack that would result in more "yes" responses to the Checklist?
4. Together as a group, put together five snacks that consider most, if not all, of the points on the "Snack Checklist".

SNACK CHECKLIST

Not all of your snacks may consider every one of these points but, over-all they are good guidelines to remember when planning snacks for young children.

1. Are the foods chosen nutritious?

2. Are the foods safe for young children?

3. Are the serving sizes appropriate for the pre-school child?

4. Does the snack include a balance of:
   a. Color - in the foods themselves or in the garnishes?
   b. Texture - soft, crisp, firm-textured, starchy, and other type foods?
   c. Shape - different sized pieces and shapes of foods?
   d. Flavor - blend and tart or mild and strong flavored foods?

5. Are most of the foods and food combinations one children have learned to eat?

6. Have children's cultural and ethnic food practices been considered?

7. Are the children included in some of the preparation and/or serving of the food?

8. Are different kinds or form of foods (fresh, canned, dried) included?

9. Are the ingredients economical and readily available?

(adapted from: Children, Food, and Family Day Care, p. 106)

Lesson 2

PLANNING SNACKS FOR CHILDREN—READING

SPEAC for NUTRITION

Individual Students
1 Hour

Instructions:

Read Chapter 12 "Planning Snacks for Children" in Child Nutrition and Health, pp. 139-146 and the information sheets from Children, Food, and Family Day Care that will be given you.

Write the answers to the following questions:

1. Would the following snacks meet the snack guidelines outlined by the Child Care Food Program? If some do not, what could be changed to have them become O.K.?

Snacks	Yes	No	Change
1. Milk Cheese Sticks			
2. Apple Juice Popcorn Balls			
3. V-8 Vegetable Juice Corn Meal Muffins and Honey			
4. Vanilla Ice Cream in cones			
5. Milk Banana-Nut Pop Sticks			
6. Orange sections Date Bread			

2. Look at the display of beverages set up by your teacher. Tell which drinks fulfill the juice requirements for breakfast or snack time as set up by the Child Care Food Program. Figure the cost/ounce.

Beverage #	Beverage Name	Yes	No	Cost/Ounce
1				
2				
3				
4				
5				
6				

Are fruit drinks always more economical, money-wise?

3. Find a cookie recipe that you would consider nutritious. Write the ingredients below.

4. Many times vending machines (and fast-food restaurants) are the only places available for snacks.

List below ten choices of nutritious snack foods that could be put in vending machines:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

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List five drinks that would be nutritionally sound and could be put in vending machines:

1.
2.
3.
4.
5.

(previous question adapted from *Student Workbook for Child Nutrition and Health*, p. 37)

What could you do to make it possible to find these foods in vending machines used by young children?

5. What food groups are most often missing from fast food menus?

How could a caregiver assure that a child would not miss the nutrients from these foods?

6. Plan five snacks for children that would meet the guidelines set by the Child Care Food Program.

1 2 3

4 5

Lesson 3

YOU BE THE JUDGE
AN EVALUATION FORM FOR JUDGING GOOD SNACKS FOR CHILDREN

Individual Students
1/2 - 1 Hour

Instructions:

Your job is to put together everything you have learned about food and young children into a plan that you will use to evaluate the snack experience you will be planning for young children. There are many ways that you could do your evaluation plan: your teacher will be judging your plan by how well it reflects all the important things to consider when planning snack experiences for young children.

Here are some ways that you might do your evaluation plan. You will probably think of others.

1. You might put together a check-sheet that you could fill out after the snack experience is over. It could be checked "yes" or "no" or could have more complicated categories to check:

   EXAMPLE:
   Children and caretakers talked comfortably while eating   Yes   No

2. You might write out questions that you could answer after doing the snack experience:

   EXAMPLE:
   How were the foods made attractive to the young children?

3. You might make a plan for writing a few paragraphs about the experience. Outline the topics which might be discussed and what you might say about them.

   EXAMPLE:
   Nutrition: Basic Four Food Groups, Child Care Food Program guidelines, nutrients . . . . .
   Variety: Textures, colors, forms . . . . .
   Atmosphere: conversation, humor, learning . . . . .
   Etc.

4. You might make an observation sheet for a classmate to record while the food experience is taking place. It could look much the same as the checklist in #1 or could be one of your own making.

5. You may even be able to use a technique like videotaping if you check with your teacher. You would still have to work up a plan for how you would evaluate what was taped.

6. You could come up with something entirely different. Use your imagination plus what you've learned in this unit!

Use your evaluation plan to evaluate one or more of the snack plans you created in Activity #2 "Planning Snacks for Children." Give your evaluation plan to your teacher for approval before you use it to evaluate the snack experience you will be doing in the next activity.

Lesson 4

PUTTING IT ALL TOGETHER
PROVIDING A SNACK EXPERIENCE FOR YOUNG CHILDREN

SPEAC for NUTRITION

Individual Students
2 1/2 Hours

Instructions:

Now is the time to "Put it all together." You will be planning, doing, and evaluating a snack experience for young children.

Follow these steps:

Check When Completed

1. Decide the snack which will be prepared. It may be one you have planned for one of the earlier activities in this section or may be an entirely new idea.
2. Complete the planning sheet for the snack and check it with your teacher.
3. Schedule a day for doing your snack in the lab school or at your field site.
4. Prepare and carry out the snack experience with the children:
    - a) Check to make sure the ingredients and materials you need have been provided for.
    - b) Do the before-hand preparation so you are ready to go the day you are scheduled.
    - c) Be sure that you have provided for the evaluation plan. Do you need an observer and does he/she know what he/she is to do? Do you need special equipment and someone to operate it?
    - d) Clue in your assistants as to their roles and responsibilities.
    - e) Make sure the snack area is set up as you have planned. Provide for an efficient way of serving.
    - f) If children are to cook and/or help with serving, provide ways of making these activities successful experiences for them.
    - g) Provide for clean-up. Recruit help before if you know you will need it.
5. Complete the evaluation of the snack experience. Hand in to your teacher. You will receive written and/or oral feedback (conference) from your teacher and from the Early Childhood teacher.

SNACK PLANNING FORM

Snack

1. Milk ________
2. Vegetables and fruits ________
3. Bread and bread alternatives ________
3. Meat and meat alternatives ________

Ingredients needed: (mark "A" by those which are available and "P" by those which need to be purchased)

________ ________ ________

________ ________ ________

________ ________ ________

Tasks which need to be completed beforehand: (when?)

________ ________ ________

________ ________ ________

________ ________ ________

Assistance that will be needed from:

Early Childhood Teacher: ________

____

Classmates: ________

________ How many needed? ________

Children: ________

________ How many needed? ________

Special arrangements or equipment necessary

____

____

____

EVALUATION

Each of the five units in the student curriculum is inclusive of evaluation activities. This evaluation may be implemented as learning experiences or as a measurement of evaluation.

One evaluation tool has been designed to compliment the student curriculum. Its suggested use is as a post test. The tool may also be appropriate as a pre-test.

NAME ______________________________

FOOD AND CHILDREN

Directions:

Circle the letter before the answer that best completes each statement or answers each question.

EXAMPLE:

A good source of protein is:

- a. Green beans
- b. Chicken
- c. Oranges
- d. Apple juice

1. Which of the following types of food would be most likely to appeal to children?
   - a. Lumpy
   - b. Sticky
   - c. Crunchy
   - d. Stringy
2. Which of the following should not be used to encourage a child who picks at his/her food?
   - a. Sweets
   - b. Finger foods
   - c. Surprises
   - d. Decorations
3. What is an example of a "full-strength fruit or vegetable juice?"
   - a. Hi-C Orange Drink
   - b. Gator-Ade
   - c. Welch's Grape Juice
   - d. Tang
4. Babies often smear food on their trays. When they do this, we could say that they aree using food mainly as a ______________ experience.
   - a. Social
   - b. Nutritional
   - c. Sensory
   - d. Language

5. We learn to like some foods:

   a. Through happy experiences with those foods
   b. By watching other family members enjoy them
   c. Because they are served to us
   d. All of the above

6. The best way to help young children develop better eating habits is to:

   a. Tell them the right foods to eat
   b. Let them eat junk foods until they get tired of them
   c. Let them have dessert only if they eat their vegetables
   d. Give them many experiences with a variety of nutritious foods

7. What is often lacking in American diets?

   a. Iron
   b. Protein
   c. Fat
   d. Carbohydrates

8. In one day, a pre-schooler had one serving each of orange juice, peas, and applesauce. How does this compare with the recommended number of servings for the fruit and vegetable group?

   a. Not enough servings
   b. Just the right number of servings
   c. Too many servings
   d. There are no recommendations for a pre-schooler

9. Jennifer, a four-year-old, isn't getting enough Vitamin C. What besides citrus fruit, could be added to her diet to help this problem?

   a. Whole wheat bread
   b. Cocoa
   c. Eggs
   d. Tomatoes

10. Oranges, broccoli, and strawberries are all foods included in the fruit and vegetable group. This group is a good source of:

   a. Protein and Iron
   b. Calcium and Iron
   c. Thiamin and Riboflavin
   d. Vitamins A and C

11. If your diet is low in Iron, besides meat which food could help you get more Iron?

    a. Milk
    b. Oranges
    c. Cheese
    d. Greens

12. Why is it a good idea to encourage children to cook?

    a. They will usually eat what they've helped make
    b. It makes them feel smart and capable
    c. It encourages thinking and problem solving
    d. All of the above

13. The following lunch menu was planned for a child care center:

    Hamburger in enriched bun
    Coleslaw Pears

    What needs to be added so that the menu has foods from all four food group?

    a. Green beans
    b. Crackers
    c. Milk
    d. Apple

14. Comparing a teen to a pre-schooler:

    a. Both need the same nutrients but in different amounts
    b. Teens do not need Vitamin C
    c. Both need the same nutrients and amounts
    d. Pre-schoolers need more calories

15. Two-year-olds may suddenly eat very little. Not eating is probably connected with:

    a. Being part of a certain cultural group
    b. Not liking very many foods
    c. A slowing down of body growth
    d. Wanting to please the adults around them

16. Look at this menu:

    Meatball
    Mashed potatoes Applesauce
    Bread and Butter
    Milk

What should be added to add the most interesting to a young child?

a. Rice
b. Carrot sticks
c. Squash
d. Cauliflower

17. Caregivers should most often use the children's lunchtime to:

a. Record which foods each child is eating
b. Clean up the room
c. Plan menus with other staff members
d. Eat with the children

18. What is the most important reason for planning a certain snack for young children? The foods are:

a. Nutritious
b. Colorful
c. Low cost and easy to find
d. Familiar to the children

19. How much can a child care worker do to help young children eat more nutritious foods?

a. Nothing. Children are born with food likes and dislikes.
b. Very little. Children only eat with they feel like eating.
c. Much. Children learn food likes and dislikes.
d. Very much. Children eat what adults tell them to eat.

20. The following breakfast menu was planned for a pre-schooler:

Peanut Butter
Whole Wheat Toast Milk

What needs to be added so that the menu has foods from all four food groups?

a. Orange juice
b. Scrambled eggs
c. Cereal
d. Cocoa

21. What is the FIRST thing you should do to try to get vending machines that carry nutritious foods?

a. Write to your Congressman and ask for laws to stop junk food machines.
b. Talk to the owners of the buildings where the vending machines are located.
c. Put slugs in machines that don't carry nutritious foods in order to make them "out of order."
d. Make picket signs and walk back and forth in front of the machines with junk food.

22. What is the reason for having snacks in a day care center?

   a. Some snacks contribute to tooth decay.
   b. Snacks can help meet health needs.
   c. Snacks may spoil appetites for meals.
   d. Some snacks can add many calories and few nutrients.

23. A day care teacher gives candy to the children when they obey her directions. What are the children learning?

   a. Food can be used as a reward.
   b. Candy is a "junk" food.
   c. Food tastes better when they are hungry.
   d. Candy is bad for their teeth

24. Nuts, popcorn, and raisins are discouraged for pre-school children because:

   a. They may cause choking
   b. They are not nutritious
   c. They encourage eating with the hands
   d. They may cause a mess

25. What snack does not meet the Child Care Food Program Guidelines?

   a. Apple slices and bran muffins
   b. Milk and apple juice
   c. Hard-cooked eggs and corn bread
   d. Carrot sticks and whole wheat crackers

26. If a child does not drink milk, which nutrient may be lacking in his/her diet?

   a. Vitamin C
   b. Iron
   c. Carbohydrate
   d. Calcium

Grade: 9 10 11 12
(circle one)

Sex: M F
(circle one)

STUDENT UNIT

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Food Models

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Audio-Visuals:

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Computer Programs:

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available through local education computer program agencies, high school terminals, and university extension agencies.